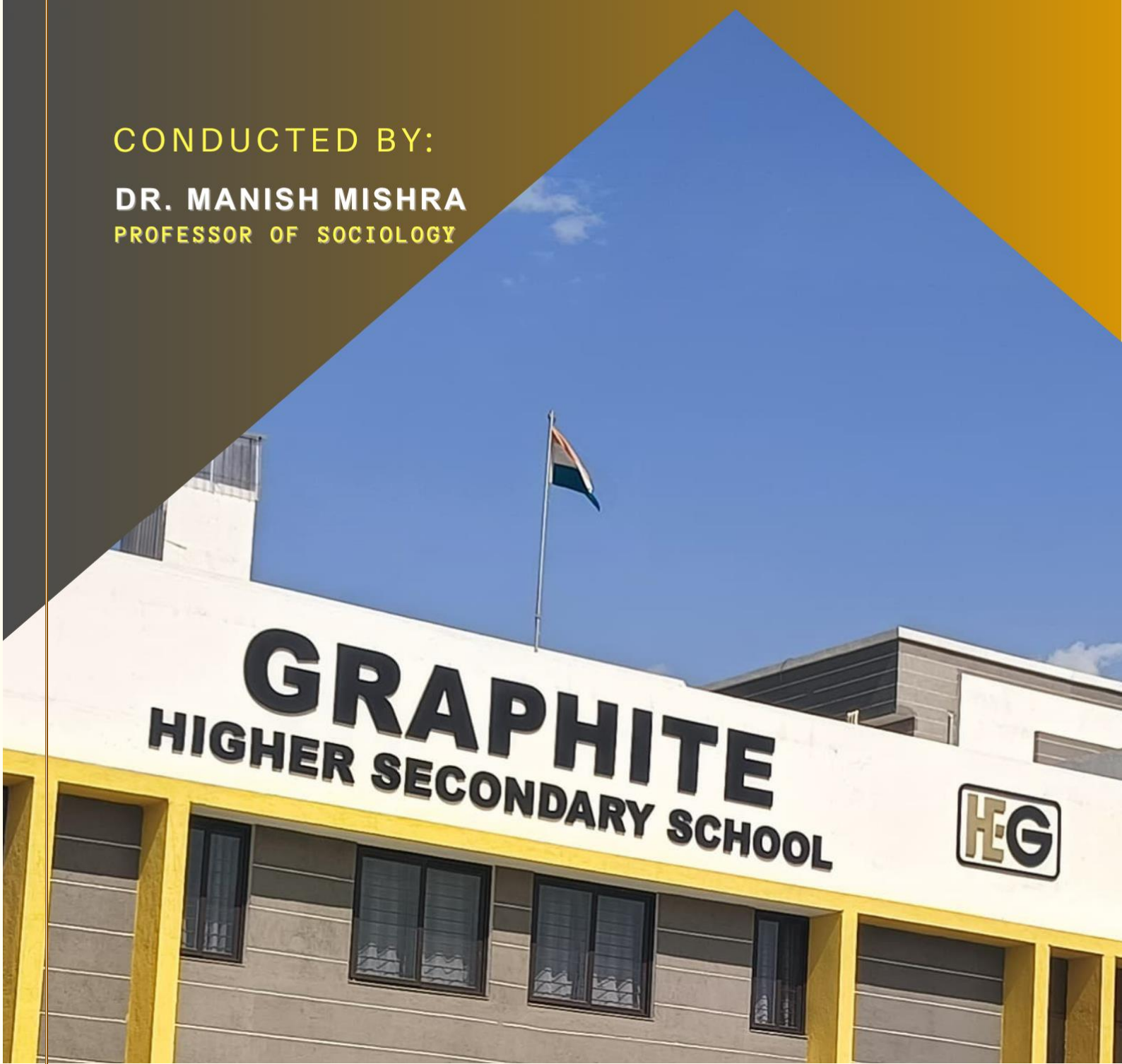


2025

IMPACT STUDY

CONDUCTED BY:

DR. MANISH MISHRA
PROFESSOR OF SOCIOLOGY

The image shows the exterior of a school building. The building is white with yellow accents around the windows and doors. A large flagpole stands in front of the building, flying the Indian national flag. The sky is blue with some light clouds. The text 'GRAPHITE HIGHER SECONDARY SCHOOL' is prominently displayed on the building's facade.

GRAPHITE
HIGHER SECONDARY SCHOOL



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This study would not have been possible without the generous support and valuable contributions of many individuals and institutions.

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A special note of appreciation goes to the students, teachers, parents, and community members who shared their time, insights, and honest reflections. Their voices lie at the heart of this assessment, offering a rich and authentic understanding of the school's evolving role and impact in the community.

Finally, I wish to acknowledge all those who provided direct or indirect support, guidance, and encouragement throughout the course of this research. Their collective contributions have significantly enriched the depth, integrity, and impact of this report.

BHOPAL

Dr. Manish Mishra





Executive Summary

This study comprehensively evaluated the impact of HEG Mandideep's Corporate Social Responsibility (CSR) funding on Graphite Higher Secondary School, assessing changes in academic performance, infrastructure, and stakeholder perceptions from July 2023 to June 2025 using a mixed-methods approach.





Key Findings:

Student Profile & Growth:

1. The student body (25 surveyed) showed balanced gender distribution and even representation across classes VIII-XII, all with over two years of enrollment.
2. Total student strength grew from 1748 in 2023-24 to 1824 in 2024-25, indicating increasing appeal and validation of educational quality.

• Academic Performance & Learning Outcomes (Chapter 5):

1. **Students** overwhelmingly reported improved academic performance (92% positive), increased interest in learning (100% positive), better lesson comprehension (88% positive), and more participation opportunities (96% positive), alongside universal improvements in teaching methods.
 2. **Parents** unanimously perceived improvements in their children's academic performance and teaching methods, noting diverse indicators of increased learning interest and overall benefit.
 3. **Community members** observed significantly improved quality of education (90% "Significantly"), better student academic performance (90% "Yes, frequently"), enhanced future preparedness (90% "Yes, much"), and increased student confidence/enthusiasm (90% "Yes, more").
 4. **Teachers** unanimously confirmed significant improvements in student academic performance, enthusiasm, access to resources, and critical thinking skills, largely attributing gains to increased participation and audio-visual aids.
 5. Academic results showed a commendable 100% pass rate up to Class IX for both years, with strong overall performance in higher classes, though specific streams (e.g., Class IX, X, XI Commerce, XII PCB) were identified for targeted support.
- ### • Infrastructure and Facilities (Chapter 6):
1. The school boasts a robust 12,140 sq. meter campus with 69 learning spaces (21 digital classrooms), specialized labs, and a well-resourced library.





2. Comprehensive health, hygiene, and safety provisions include ample gender-segregated toilets, water purifiers, a clinic, fire safety systems, CCTV, and accessible ramps.
3. Technology integration (Wi-Fi, web-based programs) and school-owned transport facilities are robust.
4. All stakeholder groups (students, parents, community, teachers) consistently reported significant improvements across infrastructure, learning materials, drinking water access, and overall school environment appeal.

• **Impact of School Transformation (Chapter 7):**

1. **Students** perceived significant improvements in classroom conditions, overall school environment, and personal benefits, noting a safer and more comfortable learning space.
2. **Parents** were unanimously "Very satisfied" with the changes, observing positive impacts on their children (e.g., increased mental strength) and commending school communication and receptiveness to suggestions.
3. **Teachers** rated overall changes as "Highly positive," reporting increased motivation and job satisfaction driven by a positive environment and teamwork, and emphasizing student academic achievements in board exams.
4. **Community members** unanimously believed the school's improvements significantly boosted the community's image, strongly influenced parental enrollment, increased community engagement, and brought significant economic benefits, contributing to a safer environment for youth.

• **Areas for Further Development:**

1. Despite widespread positive perceptions, stakeholders offered specific suggestions:
2. **Students:** Better indoor sports facilities and more drinking water taps.
3. **Parents:** Emphasis on sports facilities and materials.
4. **Teachers:** Provision of Smart Boards and specialized subject labs (e.g., Commerce, Social Science).





5. **Community Members:** Allocation of an alumni room and continued focus on positive teacher-student interactions.

Conclusion:

The study unequivocally demonstrates that Graphite Higher Secondary School has undergone a successful and impactful transformation, largely attributed to HEG Mandideep's CSR funding. The consistent and overwhelmingly positive perceptions across all stakeholder groups—students, parents, teachers, and community members—underscore the school's enhanced academic performance, improved infrastructure, and its growing positive influence on student well-being and the broader Mandideep community. The identified areas for further development provide clear pathways for sustained growth and continued excellence.



Chapter 1: Introduction

BACKGROUND

This chapter provides a foundational understanding of Corporate Social Responsibility (CSR) in India, tracing its historical evolution from ancient traditions of charity to its modern, legally mandated framework. It then introduces HEG Ltd. and details its extensive CSR initiatives, highlighting their commitment to social welfare, education, and sustainable development. A particular focus is placed on the Graphite Higher Secondary School, outlining its history, growth, and the holistic educational philosophy it embodies. Finally, the chapter establishes the core concept of this study: to analyze the multifaceted impact of schools on students' academic and overall development, leading to the specific objectives of assessing the impact of HEG's contributions to Graphite Higher Secondary School.



Corporate Social Responsibility: Indian Perspective

The history of Corporate Social Responsibility (CSR) in India reflects a long journey rooted in cultural, religious, and ethical traditions that have evolved over centuries. In ancient India, the concepts of charity and service, known as **DĀNA** (Donation) and **SEVA**(SERVICE), guided individuals and business communities to contribute to social welfare. Merchants, traders, and kings actively supported the construction of temples, rest houses, schools, healthcare centers, and public utilities. Prominent business



communities such as the Jains, Marwaris, and Parsis played significant roles in early philanthropic activities, considering wealth as a resource meant for community development.

During the colonial period, with the growth of industrialization in the 18th and 19th centuries, a new form of industrial philanthropy emerged. Influential industrialists like Jamsetji Tata, GD Birla, and Sir Dorabji Tata became pioneers of organized CSR by establishing institutions dedicated to education, healthcare, and scientific research. These initiatives were driven largely by personal values and a moral sense of duty rather than any formal government policy or legal requirement.

After India gained independence in 1947, businesses were viewed as important contributors to nation-building efforts. Influenced by Mahatma Gandhi's principle of "Trusteeship", which emphasized that wealth should be used for the benefit of society, many business leaders voluntarily supported rural development, education, and healthcare projects. During this period, CSR continued to remain voluntary and largely philanthropic, without any structured or mandated framework.

The economic liberalization of 1991 brought major changes to CSR in India. As the country opened up to global markets, Indian companies began adopting international CSR standards and practices. The growing influence of globalization, media, and civil society created greater public expectations for corporate responsibility. Businesses started integrating CSR into their organizational policies, focusing on sustainability, ethical governance, and transparent reporting. Business associations such as the Confederation of Indian Industry (CII) and the Federation of Indian Chambers of Commerce and Industry (FICCI) actively promoted CSR best practices and knowledge sharing.

A major milestone in India's CSR journey was the enactment of the Companies Act, 2013. With this legislation, India became the first country in the world to make CSR spending mandatory for certain companies based on their financial criteria. Under Section 135 of the Act, companies meeting the specified thresholds are required to allocate at least two percent of their average net profits over the previous three years to CSR activities. The law also specifies a wide range of eligible CSR activities, including education, healthcare, poverty alleviation, gender equality, environmental sustainability, heritage preservation, and rural development.





In the present day, CSR in India has become an integral component of business strategy and governance. Companies collaborate with non-governmental organizations, government agencies, and international bodies to execute impactful social programs. The major focus areas include education, skill development, healthcare, sanitation, environmental conservation, livelihood promotion, women empowerment, and disaster relief. Prominent Indian companies such as Tata Group, Infosys, Reliance, Wipro, Mahindra Group, and ITC have made significant contributions through their structured CSR initiatives.

In conclusion, the evolution of CSR in India reflects a significant transformation from ancient traditions of voluntary giving to a comprehensive, legally mandated framework that actively contributes to national development. CSR continues to play a vital role in promoting inclusive growth and addressing India's social and economic challenges.

HEG and their CSR Work

Corporate Social Responsibility (CSR) has evolved as an integral element of corporate governance and sustainable development, especially in the Indian corporate sector. HEG Ltd.¹, a prominent industrial entity, exemplifies how CSR can be embedded into the core functioning of a business to address social, economic, and environmental challenges. This section explores the various CSR initiatives undertaken by HEG Ltd., illustrating its commitment to inclusive growth and sustainable development.

At HEG, CSR is viewed not merely as a statutory obligation but as a deeply ingrained philosophy that reflects the company's identity. HEG believes that true corporate success lies in contributing to the betterment of society and the environment. Its CSR initiatives aim to uplift underprivileged communities, promote inclusive development, and safeguard the environment while ensuring business sustainability.

NUTRITION AND EDUCATION: THE AKSHAYA PATRA INITIATIVE

A flagship initiative of HEG's CSR activities is its collaboration with the Akshaya Patra Foundation. This partnership has resulted in the establishment of a mega kitchen in

¹ HEG Limited (HEG) is an Indian company primarily involved in the manufacturing and exporting of graphite electrodes. They operate the world's largest single-site integrated graphite electrodes plant, located in Mandideep, near Bhopal, Madhya Pradesh. HEG's operations also include a power division and the production of carbon specialty products.



Bhopal, inaugurated by distinguished state dignitaries. This facility serves as the first of its kind in Madhya Pradesh, delivering nutritious mid-day meals to approximately 50,000 children across 900 schools in Bhopal and Raisen districts. The initiative not only addresses classroom hunger but also enhances school attendance, concentration, and overall academic performance. The semi-automated kitchens ensure the highest standards of food safety, hygiene, and efficiency in food preparation and distribution. The success of this program has also been acknowledged by students themselves, who express satisfaction with the quality and taste of the meals, which, in turn, encourages regular school attendance.

RURAL LIVELIHOOD DEVELOPMENT: PARTNERSHIP WITH GLOBAL VIKAS TRUST

HEG has made significant strides in rural development through its collaboration with the Global Vikas Trust (GVT), a non-profit organization founded by Mr. Mayank Gandhi. GVT works towards transforming the lives of farmers by promoting horticulture, providing subsidized high-quality saplings, and establishing market linkages. The initiative spans 27 districts across Maharashtra, Madhya Pradesh, and Gujarat, benefiting over 21,000 farmers. In addition to enhancing farmers' incomes, the project has also led to the plantation of over 442 lakh trees, thereby contributing to environmental conservation and sustainable agricultural practices.

HIGHER EDUCATION: SUPPORTING ASHOKA UNIVERSITY

HEG extends its CSR efforts into the field of higher education by supporting Ashoka University, a leading liberal arts and sciences institution in India. Ashoka University, established through collective public philanthropy, offers high-quality education while ensuring accessibility through financial aid and scholarships for deserving students. HEG's support helps the university in its mission to foster academic excellence, critical thinking, and holistic development among students, preparing them to become future leaders and innovators.

LOCAL EDUCATIONAL EMPOWERMENT: THE GRAPHITE SCHOOL

At the local level, HEG has played a pivotal role in the development of Graphite School in Mandideep. The school has experienced remarkable growth in academic performance, infrastructure, and holistic education. HEG's investments have transformed the school's infrastructure, providing modern classrooms, laboratories,



libraries, and sports facilities. The school emphasizes holistic development by offering diverse extracurricular activities such as chess, self-defense training, astronomy clubs, and career counseling, alongside educational trips and field excursions. These efforts contribute to the all-round development of students, making the Graphite School one of the most sought-after educational institutions in the region.

SOCIAL WELFARE: APNA GHAR ASHRAM

HEG sponsors Apna Ghar Ashram in Bhopal, a sanctuary for destitute and homeless individuals. The Ashram provides shelter, food, medical care, and rehabilitation services for individuals rescued from the streets, railway stations, and public spaces. With a capacity to accommodate 120 individuals, Apna Ghar has reunited over 150 rescued persons with their families, including heartwarming instances such as the recent reunion of an elderly man, Ramesh Babu, with his long-lost sister after years of separation. This initiative underscores HEG's commitment to providing holistic care and restoring dignity to the most vulnerable sections of society.

CULTURAL PRESERVATION: SABHYATA FOUNDATION

HEG's CSR commitment also extends to preserving India's rich cultural heritage through its partnership with the Sabhyata Foundation. This organization is responsible for the maintenance and development of several historical sites, including the Red Fort and Bhimbetka ancient rock caves. HEG's support helps ensure that these heritage sites are preserved and maintained for future generations, contributing to the cultural and historical consciousness of the nation.

Briefly, HEG's CSR journey illustrates a comprehensive and multifaceted approach to corporate responsibility. Its initiatives span crucial sectors such as nutrition, education, rural livelihoods, social welfare, and cultural preservation, demonstrating the company's deep commitment to sustainable and inclusive development. Through these endeavours, HEG not only fulfills its social obligations but also contributes significantly to nation-building and community empowerment, setting a benchmark for responsible corporate citizenship in India.





Through these multifaceted CSR programs, HEG illustrates its dedication to sustainable development and nation – building, setting a standard for corporate citizenship.





Studied School: Graphite Higher Secondary School

Graphite Higher Secondary School, established in 1981, operates under the foundational philosophy encapsulated by the Sanskrit adage "श्रद्धावान् लभते ज्ञानम्" which translates to "Humble and Respectful Attain Knowledge." Initially, it was catering to a pre-primary class with an enrollment of 8 students and a foundational team of 2 teachers. The institution has undergone significant expansion since its inception, evolving from a modest facility within the premises of HEG Ltd. to its current configuration of two expansive structures. Between 1983 and 2003, the school experienced a period of gradual expansion, extending its academic provisions up to the 5th standard. During this twenty-year span, the teaching staff increased to 10 members, accommodating a student body that grew to 350. In 2004, the institution secured approval from the Government of Madhya Pradesh to introduce classes 6, 7, and 8. This expansion necessitated an increase in faculty, bringing the total number of teachers to 12 to support the growing student enrollment. Responding to the increasing demand for secondary and higher secondary education, the school subsequently applied for the introduction of classes 9 through 12. While the initial application sought English-medium instruction exclusively, the government granted approval for both Hindi and English mediums, thereby broadening the school's accessibility and reach within the community. A pivotal development in the school's trajectory occurred in the academic year 2014-2015 with the attainment of CBSE affiliation. At this juncture, the institution comprised a faculty of 27 teachers and served approximately 1,200 students. This significant growth in student enrollment and sustained demand for admissions continued consistently through the 2022-2023 academic year.

Initially, the school was founded to provide accessible, quality education specifically for the children of HEG Ltd. employees at a nominal cost. Over time, Graphite Higher Secondary School has broadened its scope, now serving a diverse student population drawn from various geographical areas, while consistently upholding its commitment to delivering high-quality education at an affordable fee. This growth has solidified its reputation as a leading educational institution within the Raisen District and surrounding regions.

The school fosters a dynamic learning environment characterized by high-quality pedagogical practices and a faculty distinguished by extensive experience and expertise.



Notably, Graphite Higher Secondary School pioneered the integration of e-learning initiatives in the region, aiming to enhance cognitive development and provide advanced learning opportunities for students. The institution's educational philosophy emphasizes holistic development, striving for excellence in both academic and co-curricular domains. It integrates traditional values with modern technological advancements, promoting principles of peace, harmony, and cultural rootedness among its students.

A holistic approach is central to student development at Graphite, encompassing cognitive, physical, and spiritual growth. The pedagogical framework extends beyond conventional classroom instruction, encouraging students to engage with external environments through observation and internal reflection to deepen their understanding. Complementary cultural programs, workshops, and co-curricular activities are designed to cultivate inherent talents, enhance critical skills, and build self-confidence.

The campus infrastructure supports a conducive learning environment, featuring well-maintained classrooms, a playground, an auditorium, and other essential amenities, all upheld to high standards of cleanliness and hygiene. Specialized facilities include well-equipped laboratories for Mathematics, Computer Science, Chemistry, and Physics, alongside dedicated spaces for Art, Music, and Sports. A language laboratory and an audio-visual room further enhance students' auditory comprehension and persuasive communication skills.

The institution prioritizes students' holistic development by integrating co-curricular activities with academic instruction, fostering attributes such as sportsmanship and a positive life orientation. This approach aims to cultivate not only achievement but also a continuous learning mindset. Graphite's commitment to fostering multifaceted knowledge empowers students to identify their individual talents, define their purpose, and establish personal goals, thereby preparing them for leadership roles.

Concept of the study

Schools are the cornerstone of formal education and play a vital role in shaping students' academic, personal, and social development. The academic background





acquired during school years serves as the foundation for higher education, career prospects, and personal growth. This report presents a detailed analysis of how schools influence students' academic backgrounds and contribute to their overall development.

Academic Excellence and Knowledge Acquisition

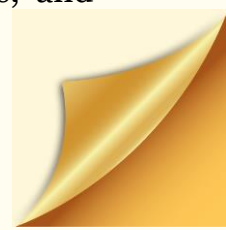
One of the primary functions of school is to deliver structured education across various disciplines. The curriculum is carefully designed to: Build a strong foundation in core subjects such as Mathematics, Science, Languages, and Social Studies; Foster critical thinking, problem-solving, and analytical reasoning; Encourage inquiry-based learning where students explore, question, and discover knowledge independently; and Provide opportunities for advanced learning through enrichment programs and specialized courses. The depth and breadth of the academic curriculum ensure that students not only acquire essential knowledge but also develop a lifelong love for learning.

Role of Teachers and Pedagogy

Teachers play a critical role in shaping academic success. Effective teachers use diverse teaching strategies including lectures, discussions, project-based learning, and technology integration to cater to different learning styles. Teachers act as mentors, providing academic guidance, emotional support, and motivation. Regular assessments, constructive feedback, and remedial sessions help identify students' strengths and areas for improvement. Continuous teacher training ensures educators remain updated with the latest teaching methodologies and educational research. A dedicated and well-trained teaching staff creates a nurturing and stimulating academic environment.

Learning Environment and Educational Resources

The school's physical and digital infrastructure greatly enhances the learning experience. Modern, well-equipped classrooms with multimedia aids make lessons more interactive and engaging. Access to diverse reading materials, research resources, and digital databases fosters independent study and intellectual curiosity. Science and computer labs provide hands-on experience, allowing students to apply theoretical concepts in practical settings. Use of e-learning platforms, virtual classrooms, and





educational software enriches the learning process and prepares students for a technology-driven world.

Co-Curricular and Extracurricular Activities

Academic development is complemented by participation in co-curricular and extracurricular activities. Sports and Physical Education promotes physical health, discipline, and teamwork. Participation in arts, music, drama, and literature enhances creativity and self-expression. Debate and Public Speaking improves communication skills, confidence, and critical thinking. Clubs and Societies allow students to explore hobbies and interests, fostering a sense of belonging and leadership. Such activities help in the holistic development of students, making them well-rounded individuals.

Social and Emotional Development

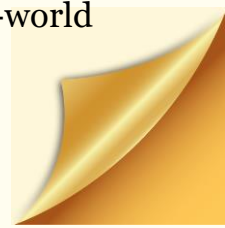
Schools provide an environment for developing essential social and emotional skills. Daily interactions with classmates help build friendships, empathy, and teamwork. Students learn to handle disagreements constructively. Professional counselors address academic, personal, and emotional concerns, ensuring students' mental well-being. Programs promoting kindness, integrity, and responsibility shape students' character and ethical outlook. These skills are critical for personal happiness, workplace success, and responsible citizenship.

Values, Ethics, and Citizenship

Beyond academic instruction, schools serve as moral and ethical guides. Schools instill habits of punctuality, responsibility, and respect for rules. Students learn about their rights and duties as citizens, preparing them to contribute to society. Exposure to diverse cultures, languages, and global issues fosters open-mindedness and cultural sensitivity. A strong value system helps students navigate complex ethical situations in personal and professional life.

Career Preparation and Guidance

Schools play an essential role in preparing students for higher education and career choices. Professional guidance helps students explore career interests and pathways. Emphasis on skills such as time management, goal setting, and decision-making prepares students for future challenges. Opportunities to engage in real-world





experiences give students practical exposure to various professions. A well-rounded academic background increases students' competitiveness in higher education and job markets.

Parental Involvement and Community Support

The partnership between school, parents, and the community strengthens the educational experience. Regular communication with parents ensures they are active participants in their wards academic journey. Collaborations with local organizations offer students additional learning and service opportunities. Successful alumni often serve as role models, mentors, and supporters for current students. Strong community ties enhance the school's capacity to support student development.

In short, the impact of school as an academic background is multifaceted and long-lasting. Schools not only impart knowledge but also nurture character, instill values, and develop essential life skills. A positive school experience fosters academic excellence, emotional well-being, and prepares students for the challenges of higher education, career, and life. Continuous investment in quality teaching, resources, co-curricular programs, and student support services ensures that schools remain vital institutions in shaping future generations.

Need and Objective of the Study

HEG Mandideep has been a significant contributor to the development of Graphite Higher Secondary School located in Mandideep, Raisen. This funding has aimed to improve educational outcomes, enhance infrastructure, provide resources, support underprivileged students to the nearby community. To understand the effectiveness and long-term impact of this support, an impact study is proposed. This study will provide valuable insights into the returns on HEG's philanthropic efforts and identify areas for future strategic planning.

The primary objectives of this impact study are:

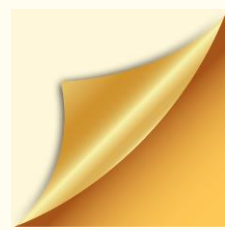
- To assess the overall impact on the academic performance and learning outcomes of students;
- To evaluate the improvements in school infrastructure, resources, and facilities;





- To gauge the perceptions of students, teachers, parents, representatives of funding agency and the local community regarding the changes during the last 2 years;
- To identify the social and economic ripple effects of the school's improvements within the Mandideep community.

In short, chapter comprehensively introduces the concept of Corporate Social Responsibility in India, illustrating its transformation from ancient philanthropic practices to a modern, mandatory legal requirement under the Companies Act, 2013, emphasizing its role in national development. It then highlights HEG Ltd. as a prime example of corporate citizenship, detailing their diverse CSR efforts, including partnerships for nutrition, rural livelihood, higher education, and cultural preservation, with a special emphasis on their pivotal role in developing Graphite Higher Secondary School. The chapter describes Graphite School's journey from a modest beginning to a thriving institution, emphasizing its commitment to quality education, holistic student development, and modern infrastructure. The core concept of the study is introduced, asserting the school's vital role in shaping students' academic and personal growth through curriculum, effective teaching, a conducive learning environment, co-curricular activities, and community support. Ultimately, the chapter sets forth the study's objectives: to assess the impact of HEG's support on student outcomes, within.





Chapter 2: Methodology

Background

This chapter outlines the methodological framework underpinning this impact study, which seeks to comprehensively understand the effects of HEG Mandideep's Corporate Social Responsibility (CSR) funding on Graphite Higher Secondary School. Employing a mixed-methods approach, the study integrates both quantitative and qualitative research paradigms to provide a holistic and nuanced understanding. This design acknowledges that while measurable outcomes offer objective indicators of change, in-depth insights into stakeholder perceptions and broader community effects necessitate qualitative exploration. The chosen methodology is designed to capture the multifaceted nature of educational impact, moving beyond simple metrics to explore the lived experiences and perceived value of the interventions. The study will specifically focus on the period from July 2023 to June 2025 to assess recent transformations.

Study Design

This impact study will employ a mixed-methods approach, integrating both quantitative and qualitative data collection and analysis techniques. This design will allow for a comprehensive understanding of the impact of HEG Mandideep's CSR funding on Graphite Higher Secondary School, providing both measurable outcomes and in-depth insights into stakeholder perceptions and broader community effects. The study will focus on the period from the academic year July 2023 to June 2025.

Data Collection Methods

Quantitative Data

Quantitative data will be collected to provide measurable indicators of change and impact.

- *Review of School Records:* This will involve a detailed examination of existing school records for the period from July 2023 to June 2025. Data points will include:
 1. *Student Enrollment:* Annual enrollment figures across different grades.





2. *Academic Reports/Grades*: Analysis of student performance in key subjects (e.g., Mathematics, Science, English) to assess improvements in academic achievement and progression rates over time.
3. *Pre- and Post-Intervention Comparisons*: Where baseline data is available (e.g., academic performance prior to the significant CSR intervention), a comparative analysis will be conducted to highlight the impact of the funding.
- *Surveys*: Semi-structured interview schedule will be administered to a representative sample of key stakeholders. These surveys will utilize closed-ended questions to gather quantifiable data on perceptions, satisfaction levels, and observed changes.
 1. *Students*: Surveys will gauge their perceptions of the learning environment, access to resources, and overall school experience.
 2. *Teachers*: Surveys will assess their views on improved facilities, availability of teaching materials, and professional development opportunities.
 3. *Parents*: Surveys will capture their perceptions regarding their children's academic progress, school safety, and the overall positive changes observed in the school.

Qualitative Data

Qualitative data will be gathered to provide rich, contextual understanding and in-depth perspectives that quantitative data alone cannot capture.

- *In-depth Interviews (KIIs)*: One-on-one interviews will be conducted with key informants who possess deep knowledge and experience related to the school and its community.
 1. *School Leadership*: Interviews with the Principal and other administrative staff to understand strategic changes, operational challenges, and overall vision.
 2. *Long-serving Teachers*: Interviews to gain insights into changes in teaching practices, student behaviour, and resource utilization over time.
 3. *Community Elders/Leaders*: Interviews to understand the broader social and economic impact of the school's improvements on the Mandideep community.
 4. *HEG Mandideep CSR Representatives*: Interviews to gather their perspectives on the fulfillment of CSR objectives, challenges, and future strategic planning.
- *Focus Group Discussions (FGDs)*: Group discussions will be facilitated to explore shared experiences, perceptions, and collective insights from various stakeholder groups.





1. *Students (various age groups)*: FGDs will explore their daily school life, challenges, benefits of new facilities, and aspirations.
2. *Parents*: FGDs will delve into their observations of their children's progress, engagement with the school, and the perceived benefits to their families and the community.
3. *Community Representatives*: FGDs will focus on the ripple effects of the school's improvements on community awareness of education, livelihoods, and general well-being.
- *Observations*: Direct observation will be conducted to validate self-reported data and provide contextual understanding. This will include:
 1. *Observation of School Activities*: Observing classroom teaching, extracurricular activities, and student-teacher interactions.
 2. *Observation of Facilities Utilization*: Assessing how new or improved infrastructure (e.g., laboratories, library, sports facilities) and resources are being utilized by students and staff.

Sampling Strategy

A purposive and stratified sampling approach will be employed to ensure representation from all relevant stakeholder groups.

1. *Students*: A stratified random sample of students will be selected across different grade levels (e.g., middle, and secondary sections) to capture diverse experiences.
2. *Teachers*: All teaching staff will be invited to participate in surveys, and a subset of long-serving teachers will be selected for in-depth interviews.
3. *Parents*: A random sample of parents will be drawn from the different grade levels represented by the student sample.
4. *Community Members*: Key community leaders and a diverse group of residents from the Mandideep area will be selected for interviews and focus group discussions.
5. *HEG Mandideep CSR Representatives*: Key personnel directly involved in the CSR funding and oversight of Graphite Higher Secondary School will be purposively selected for interviews.
6. *Field Investigator*: A dedicated Field Investigator, supported by HEG, will assist in data collection, especially for surveys and initial community outreach.





Data Analysis Techniques

- *Quantitative Data Analysis:*

1. Descriptive statistics (e.g., frequencies, percentages) will be used to summarize survey responses and school record data.
2. Comparative analysis was performed where pre-intervention data is available to assess changes in academic performance and resource availability over time.
3. Trend analysis conducted to identify patterns in enrollment, attendance, and academic grades.

- *Qualitative Data Analysis:*

1. *Thematic Analysis:* Interview transcripts and focus group discussions will be systematically reviewed, coded, and analyzed to identify recurring themes, patterns, key insights, and divergent opinions related to each study objective. This process will involve familiarization with data, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and producing the report.

Limitations of the Study

While efforts have been made to ensure rigor, the study encountered certain limitations:

1. *Baseline Data Availability:* The extent of pre-intervention data (prior to July 2023) was vary, which could limit the scope of precise "before-and-after" quantitative comparisons for all indicators.
2. *Self-Reported Perceptions:* Perceptual data from surveys and interviews relies on individuals' subjective experiences, which influenced by recall bias or social desirability bias.
3. *Attributing Causality:* While the study aims to assess impact, it was challenging to isolate the exact impact of HEG's CSR funding from other concurrent external factors that could influence the school's development or the community's well-being.
4. *Time Constraints:* The proposed timeline for the study may present limitations on the depth of certain data collection activities or the breadth of community engagement.

Briefly, chapter details the methodology for this impact study, which utilizes a mixed-methods approach to thoroughly evaluate HEG Mandideep's CSR funding on Graphite Higher Secondary School from July 2023 to June 2025. Quantitative data was collected through reviews of school records, including student enrollment, academic





grades, and pre and post-intervention comparisons, alongside surveys administered to students, teachers, and parents to gauge perceptions of changes. Complementing this, qualitative data was also gathered via in-depth interviews with key informants like school leadership, long-serving teachers, community elders, and HEG CSR representatives, as well as through focus group discussions with students, parents, and community representatives to explore shared experiences and challenges. Direct observations of school activities and facility utilization had further enriched the data. A purposive and stratified sampling strategy ensures representation across all stakeholder groups. Data analysis involved descriptive statistics, comparative analysis, and trend analysis for quantitative data, while qualitative data was undergoing thematic analysis to identify recurring patterns and insights. The chapter also acknowledges potential limitations, such as varying baseline data availability, the subjective nature of self-reported perceptions, the challenge of attributing causality solely to CSR funding amidst other factors, and potential time constraints affecting data collection depth.





Chapter 3

Status of School: Student, Teacher and Infrastructure

Background

This chapter provides a comprehensive overview of the Graphite Higher Secondary School's current status, focusing on its fundamental components: students, teachers, and infrastructure. Conceptually, a school functions as a dynamic ecosystem where these three elements are inextricably linked, each contributing to and influencing the others to foster an effective learning environment. Students represent the *raison d'être* of education, embodying the potential and purpose of the institution, while teachers serve as the pivotal facilitators, mentors, and innovators who translate curriculum into meaningful learning experiences. The physical and technological infrastructure, in turn, provides the essential foundation and resources that enable both students and teachers to thrive. This chapter will detail the demographic profiles of the student body and teaching staff, analyse recent enrollment trends, and provide a thorough assessment of the school's physical facilities and technological provisions, thereby establishing a baseline understanding of the institution's operational health and capacity.

Student and Teacher

A school is fundamentally built upon the symbiotic relationship between its students and teachers. Both are indispensable pillars, each contributing uniquely to the educational ecosystem.

Students are the foundation of any educational institution. They are not merely recipients of knowledge but active participants who bring diverse backgrounds, curiosities, and aspirations.

1. **Purpose of Education:** Without students, there would be no purpose for schools or education systems. They are the primary beneficiaries and the reason for the school's existence.
2. **Active Learners:** Students bring their unique learning styles, questions, and perspectives, which enrich classroom discussions and often challenge teachers to explore new methodologies.





3. **Future Workforce and Citizens:** Schools prepare students to become productive members of society, contributing to the economy, culture, and governance. Their development is the ultimate measure of a school's success.
4. **Community and Culture:** Students foster a vibrant school community, participating in extracurricular activities, sports, and cultural events that shape the school's identity and spirit.

Teachers are the facilitators of learning and the guiding force within a school. They are much more than mere disseminators of information.

1. **Knowledge Impartation:** Teachers are crucial for transmitting subject matter, skills, and critical thinking abilities. They translate complex concepts into understandable lessons.
2. **Mentors and Role Models:** Beyond academics, teachers often serve as mentors, guiding students through personal and social challenges, instilling values, and fostering character development.
3. **Inspiration and Motivation:** Effective teachers inspire curiosity, encourage independent thought, and motivate students to reach their full potential, often sparking lifelong passions.
4. **Curriculum Development and Innovation:** Teachers are on the front lines of education. Their insights are vital for adapting curricula, implementing new teaching strategies, and incorporating technological advancements.
5. **Assessment and Feedback:** They assess student progress, provide constructive feedback, and identify areas where students might need additional support, tailoring their approach to individual needs.

In essence, students provide the raw potential and the reason for teaching, while teachers provide the expertise, guidance, and inspiration to unlock that potential. A thriving school is one where both students and teachers are engaged, supported, and continuously learning from each other, creating a dynamic and enriching environment for all.

As previously discussed, students constitute the fundamental purpose and dynamic core of any educational institution. Their presence and engagement are essential for a school's vitality, cultural richness, and fulfillment of its academic mission. Analyzing the student strength data for Graphite Higher Secondary School for the academic years



2023-24 and 2024-25 provides valuable insights into the school's growth and its capacity to serve its primary constituents.

Quantitative Overview of Student Strength:

The provided data reveals the following student enrollment figures:

Academic Year	Total Student Strength
2023-24	1748
2024-25	1824

This indicates a discernible growth in total student strength, from 1748 in 2023-24 to 1824 in 2024-25, representing an increase of 76 students. A closer look at the class-wise distribution reveals interesting trends:

- Early Years (Nursery, KG-I, KG-II):** While Nursery saw a slight decrease (110 to 102), KG-I remained stable (125 to 126), and KG-II experienced a significant increase (115 to 153). This suggests strong intake and retention in the foundational years.
- Primary Grades (I-V):** Most primary classes show minor fluctuations, with Class V seeing a notable increase (118 to 156), indicating a potential area of growing popularity or successful student retention.
- Middle Grades (VI-VIII):** These grades maintain relatively consistent numbers, suggesting stable progression.
- Secondary Grades (IX-XII):**
 - Class X observed an increase (81 to 126), which is substantial.
 - The combined strength for Class XI (A+B+C) increased from 80 to 83.
 - Similarly, Class XII (A+B+C) saw growth from 62 to 76. This sustained or growing strength in higher grades is crucial for the academic reputation and sustainability of the school's senior programs.

In the view of the importance of students in a school, the observed growth in student strength at Graphite Higher Secondary School carries several academic implications:

- Validation of Educational Quality:** Sustained and increasing student enrollment often serves as a key indicator of a school's perceived quality, effective teaching, and a positive learning environment. Parents and students are likely attracted by the school's academic offerings and overall reputation.





2. **Expanding Purpose and Reach:** A growing student body signifies an expanding mandate for the school. It means the institution is reaching more learners and fulfilling its core purpose of imparting knowledge to a broader segment of the community.
3. **Enhanced Learning Environment (Diversity):** A larger student population naturally brings a greater diversity of thought, background, and experience into the classroom. This enriches discussions, fosters varied perspectives, and prepares students for a diverse global society.
4. **Vibrant School Culture:** As highlighted, students are integral to a school's community and culture. Increased strength can lead to more robust extracurricular activities, competitive sports teams, and a generally more dynamic and engaging campus life, contributing to holistic student development.
5. **Optimizing Teacher Engagement:** While a larger student body presents challenges, it also necessitates and validates the crucial role of teachers. Teachers are essential in managing larger class sizes effectively, ensuring personalized attention where possible, and continuously adapting pedagogical strategies to meet the needs of a diverse and growing cohort. The sustained student numbers underscore the ongoing demand for dedicated and effective educators.

In short, growth in student strength at Graphite Higher Secondary School from 2023-24 to 2024-25 is a positive indicator of its overall health and standing. It reaffirms that students are indeed the *raison d'être* of the institution, providing both the purpose for its existence and the vibrancy that defines its character. This growth, while bringing its own set of administrative and resource management considerations, ultimately underscores the school's continued success in attracting and nurturing its most vital asset its learners.

Academic Performance

Academic performance is not merely a metric of student achievement; it is a foundational pillar upon which the holistic growth and sustained development of any educational institution are built. Its influence permeates every facet of a school's operation, from its reputation and enrollment figures to its pedagogical effectiveness





and long-term viability. Academic performance of any school based on following indicators:

Enhancing Reputation and Brand Image: A school's academic results are often the most visible indicator of its quality. Strong performance in examinations, standardized tests, and various academic competitions directly contributes to a positive public perception. Parents, prospective students, and the wider community inherently seek institutions that demonstrate a commitment to academic excellence. A consistent track record of high achievement fosters trust and credibility, positioning the school as a desirable destination for education and thereby enhancing its brand image.

Driving Student Enrollment: In a competitive educational landscape, academic success is a primary driver of student enrollment. Families are increasingly discerning, often prioritizing schools with a proven ability to deliver strong educational outcomes. High academic standards attract motivated students and, in turn, create a more engaged and high-achieving student body, perpetuating a virtuous cycle of excellence. The success stories of alumni, often a direct result of the school's academic rigor, further solidify this appeal.

Attracting and Retaining Quality Faculty: Exceptional academic performance is a testament to the effectiveness of a school's teaching staff. A school that consistently produces high-achieving students is likely to attract and retain highly qualified, dedicated, and innovative educators. Teachers are drawn to environments where their efforts are demonstrably impactful and where they can contribute to a culture of scholastic achievement. This, in turn, further elevates the quality of instruction, creating a positive feedback loop for academic growth.

Fostering a Culture of Excellence and Continuous Improvement: A focus on academic performance instills a culture of high expectations throughout the school community. This encourages students to strive for their best, motivates teachers to refine their pedagogical approaches, and prompts administrators to continuously evaluate and improve educational programs and resources. It cultivates an environment where learning is valued, effort is celebrated, and intellectual curiosity is nurtured, leading to ongoing development and innovation within the institution.

Securing Resources and Affiliations: Demonstrating strong academic growth can be crucial in securing external resources, grants, and prestigious affiliations. Government





bodies, educational boards (such as CBSE in India), and private organizations often consider academic standing as a key criterion for approval, funding, or accreditation. These endorsements not only provide valuable resources but also signify a school's adherence to national or international educational standards, further boosting its reputation and offerings.

Preparing Students for Future Success: Ultimately, the primary purpose of a school is to equip students with the knowledge, skills, and values necessary for success in higher education and their future careers. Robust academic performance signifies that students are acquiring critical thinking, problem-solving, and analytical abilities. This foundational preparedness empowers them to pursue advanced studies, gain admission to reputable universities, and thrive in a dynamic global environment, reflecting positively on the school's long-term impact.

Briefly, academic performance is not a standalone achievement but an integral component of a school's developmental ecosystem. It acts as a catalyst for growth, influencing reputation, enrollment, faculty quality, institutional culture, resource acquisition, and most importantly, the future success of its students. Therefore, sustained efforts towards enhancing academic outcomes are paramount for any school aspiring to achieve comprehensive and sustainable growth.

School Status of Academic Performance last 2 years

Keeping the above in view, the academic results of the school for the last two academic sessions are being analyzed.

Session 2023-24

The academic year 2023-24 has concluded with notable results across all classes at Graphite Higher Secondary School. This report provides a detailed breakdown of student performance, highlighting strengths and areas for potential focus. The data includes student strength, number of students appeared, pass count, and fail count for each class, from Nursery to Class XII.

A strong performance is observed in the foundational classes (Nursery to Class IX) with a 100% pass rate. Challenges appear primarily in Classes X, XI, and XII, particularly in PCB and Humanities streams at the XI and XII levels, where some students did not pass.





Detailed Class-wise Performance

Class	Strength	Appeared	Passed	Failed	Pass %
Nursery to IX	1398	1398	100%	0	100%
X	81	81	80	1	99%
XI PCM	19	19	19	0	100%
XI PCB	14	14	13	1	93%
XI Commerce	34	34	34	0	100%
XI Humanities	13	13	11	2	85%
XII PCM	17	17	15	2	88%
XII PCB	8	8	5	3	63%
XII Commerce	28	28	27	1	96%
XII Humanities	9	9	8	1	89%

The overall results demonstrate strong foundational learning in the primary and middle school sections. The 100% pass rate up to class IX is commendable and reflects effective teaching and learning strategies at these levels.

Session 2024-25

The academic year 2024-25 at Graphite Higher Secondary School has concluded with the following results across various classes. This report provides a detailed breakdown of student performance, highlighting key statistics for analysis. The data includes student strength, number of students appeared, pass count, and fail count for each class, from Nursery to Class XII.

The school has achieved a remarkable 100% pass rate in many foundational and intermediate classes. Specific attention areas are identified in Class IX, X, XI Commerce, and XII PCB where some students did not pass.



Detailed Class-wise Performance

Class	Strength	Appeared	Passed	Failed	Pass %
Nursery to VIII	1419	1419	100%	0	100%
IX	120	120	118	2	98%
X	126	125	119	6	95%
XI PCM	31	31	31	0	100%
XI PCB	10	10	10	0	100%
XI Commerce	40	40	35	5	88%
XI Humanities	12	12	12	0	100%
XII PCM	19	19	18	1	95%
XII PCB	14	14	12	2	86%
XII Commerce	30	30	29	1	97%
XII Humanities	13	13	13	0	100%

The results for the 2024-25 academic year show a strong performance across most classes, with many achieving a 100% pass rate. While 2023-24, for higher classes (X to XII), specific attention might be required for certain streams (e.g., Class X, XI PCB, XI Humanities, XII PCB, XII Humanities) where non-zero fail counts are observed. This indicates effective pedagogical approaches in these grades.

Areas requiring further attention are Class IX, X, XI Commerce, XI & XII PCB, and XI & XII Humanities, where there were instances of students not passing during both academic years. To enhance overall academic excellence, the following recommendations are made:

1. Analyze the specific reasons for failures in these classes and streams (e.g., subject difficulty, student engagement, teaching methodologies).
2. Conduct a detailed analysis of the subjects and specific topics where students struggled in classes IX, X, XI Commerce, and XII PCB.
3. Implement targeted intervention programs, such as extra classes or peer mentoring, for students in these identified challenging areas.
4. Review and potentially revise teaching methodologies in subjects that show lower pass rates, ensuring comprehensive understanding.





5. Enhance student counselling and academic guidance, especially for students in higher grades, to support their learning and address any difficulties proactively.
6. Conduct workshops for teachers on effective strategies for complex topics in higher grades.
7. Encourage continuous assessment and feedback mechanisms to identify struggling students earlier.

By focusing on these specific areas, Graphite Higher Secondary School can continue its trajectory of academic improvement and support all students in achieving their full potential.

Infrastructure Facility

The provision of robust and appropriate infrastructural facilities is a fundamental prerequisite for effective teaching and learning within any educational institution. Beyond mere physical structures, a school's infrastructure encompasses a comprehensive array of resources that directly influence pedagogical effectiveness, student well-being, and the overall learning environment. This academic note delineates the critical requirements and multifaceted roles of these facilities in fostering holistic educational growth.

Adequate Classroom Spaces: Classrooms form the core of the learning environment. Essential requirements include sufficient size to accommodate student numbers without overcrowding, adequate ventilation and lighting (preferably natural), ergonomic furniture, and appropriate acoustic properties to minimize distractions. Flexible classroom layouts that support diverse teaching methodologies, such as collaborative group work, individual study, and lecture-based instruction, are increasingly vital for modern pedagogy.

Specialized Learning Environments: Beyond general classrooms, specialized facilities are indispensable for a comprehensive curriculum. These include:

1. *Science Laboratories:* Well-equipped physics, chemistry, and biology laboratories with safety features, experimental apparatus, and adequate space for practical work are crucial for hands-on scientific inquiry.





2. *Computer Laboratories:* Modern computer labs with up-to-date hardware, reliable internet connectivity, and relevant software are essential for digital literacy, research, and technology-aided learning.
3. *Libraries/Learning Resource Centers:* A well-stocked library with a diverse collection of books, digital resources, and quiet study areas promotes independent learning, research skills, and a love for reading.
4. *Art and Music Studios:* Dedicated spaces for visual arts, music, and performing arts foster creativity, aesthetic appreciation, and talent development.
5. *Sports Facilities:* Playgrounds, sports fields, indoor gymnasiums, and equipment are vital for physical education, promoting health, teamwork, and discipline.

Health and Safety Provisions: The well-being of students and staff is paramount. Essential health and safety infrastructure includes:

1. *Sanitation Facilities:* Clean, well-maintained, and gender-segregated restrooms with adequate water supply are non-negotiable for hygiene and dignity.
2. *Potable Water Supply:* Access to safe drinking water is a basic necessity.
3. *First Aid and Medical Room:* A designated space with trained personnel and essential medical supplies for immediate care in case of emergencies.
4. *Fire Safety Systems:* Functional fire extinguishers, alarms, and clear evacuation routes are critical for safety.
5. *Accessibility:* Ramps, elevators, and accessible restrooms are necessary to ensure inclusivity for students and staff with disabilities, adhering to universal design principles.

Administrative and Support Spaces: Efficient school operations rely on appropriate administrative and support infrastructure:

1. *Administrative Offices:* Spaces for the principal, administrative staff, and counseling services.
2. *Staff Rooms:* Dedicated areas for teachers to prepare lessons, collaborate, and rest.
3. *Auditoriums/Multi-purpose Halls:* Facilities for assemblies, cultural events, workshops, and community gatherings.





4. *Cafeteria/Canteen*: Spaces for students to eat in a hygienic and comfortable environment.

Technology Infrastructure: In the 21st century, robust technological infrastructure is no longer a luxury but a necessity. This includes:

1. *Reliable Internet Connectivity*: High-speed internet access across the campus to support online learning, research, and administrative functions.
2. *Networking Infrastructure*: Wired and wireless networks to facilitate seamless connectivity.
3. *Audio-Visual Equipment*: Projectors, interactive whiteboards, and sound systems in classrooms and common areas.
4. *Power Backup*: Uninterrupted power supply systems (e.g., generators, UPS) to ensure continuous operation.

Environmental Considerations: Modern infrastructural planning also incorporates environmental sustainability and comfort:

1. *Green Spaces*: Landscaped areas, gardens, and playgrounds contribute to a positive aesthetic and provide recreational opportunities.
2. *Waste Management Systems*: Effective systems for waste segregation and disposal.
3. *Energy Efficiency*: Design elements and technologies that promote energy conservation.

In short, the quality and adequacy of infrastructural facilities are directly correlated with the effectiveness of educational delivery and the overall developmental outcomes for students. Investing in well-planned, safe, and technologically advanced infrastructure is not merely an expenditure but a strategic investment in the future of education and the human capital it nurtures.





Status of Infrastructure

As per the above criteria the school operates from a single site with a total area of 12,140 square meters. It comprises 3 building blocks, each with 3 storeys, and is secured by a boundary wall.

- Total Area: 12,140 sq. meters
- Number of Sites: 1 (Single contiguous plot)
- Building Blocks: 3
- Storeys per Building: 3
- Boundary Wall: Yes

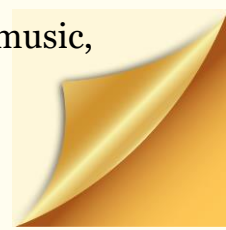
A single, contiguous plot simplifies administration and student movement. The presence of a boundary wall enhances security. Multiple building blocks and storeys suggest a well-established campus capable of accommodating a significant student population.

Learning Spaces (Classrooms & Specialized Rooms)

The school boasts a substantial number of learning spaces, including a high count of digital classrooms.

1. Total Number of Rooms (excluding labs, library, etc.): 69
 - Small-sized rooms: 20
 - Medium-sized rooms: 38
 - Large-sized rooms: 11
2. Classrooms for Running Classes: 55
3. Digital Classrooms: 21
4. Auditoriums: 1
5. Activity Rooms: 2
6. Music Room: 1
7. Dance Room: 1
8. Special Educator Room: 1

The significant number of classrooms (55 for running classes) indicates ample space for various academic sections. The presence of 21 digital classrooms is a substantial asset, facilitating modern, technology-integrated teaching methodologies and enhancing interactive learning experiences. The inclusion of an auditorium, activity rooms, music,





dance, and special educator rooms demonstrates a commitment to holistic development, catering to co-curricular activities and inclusive education. The varied room sizes (small, medium, large) offer flexibility for different teaching and learning formats.

Laboratories

The school is equipped with dedicated laboratories for various subjects, indicating a focus on practical and experiential learning.

1. Composite Science Lab: 1 (Size: 125 sq. meters)
2. Mathematics Lab: 1 (Size: 58 sq. meters)
3. Physics Lab: 1 (Size: 115 sq. meters)
4. Chemistry Lab: 1 (Size: 127 sq. meters)
5. Biology Lab: 1 (Size: 119 sq. meters)
6. Computer Lab: 1 (Size: 125 sq. meters)

The provision of separate, adequately sized laboratories for each core science discipline (Physics, Chemistry, Biology) and Mathematics, alongside a Composite Science Lab, is a strong indicator of the school's commitment to hands-on scientific and mathematical education. The Computer Lab is essential for developing digital literacy and supporting IT-based learning. These facilities are crucial for reinforcing theoretical knowledge with practical application, critical for CBSE curriculum requirements.

Library Facilities

The school has a well-resourced library, emphasizing reading and research.

1. Library Size: 125 sq. meters
2. Total Books: 5,000
 - Reference Books: 250
 - General Books: 500
 - Story Books: 450
 - Fiction Books: 400
 - Other Books: 3,500
3. Library Internet: Yes
4. Library Software: Yes





5. Dailies in Library: 4
6. Periodicals in Library: 2

A library with 5,000 books, including a good mix of reference, general, story, and fiction books, provides a rich resource for students across different age groups and interests. The availability of internet and library software suggests a modern, organized library system. Access to dailies and periodicals promotes current affairs awareness and broader reading habits, significantly contributing to students' intellectual development and research skills.

Health, Hygiene & Safety Facilities

The school demonstrates a strong commitment to student and staff well-being and safety.

1. Toilets for Female Staff: 4
2. Toilets for Male Staff: 4
3. Toilets for Girls (General): 13
4. Toilets for Boys (General): 30
5. Girls Urinal with partition: 13
6. Boys Urinal with partition: 30
7. Incinerator in Girls Toilet: Yes
8. Sanitary Pad Vending Machine: Yes
9. Health and Hygiene Maintenance: Yes (for toilets on all floors, separate toilets for staff, ramps, signboards)
10. Water Purifiers/ROs: 4
11. Clinic Facility: Yes
12. Fire Alarms: Yes
13. Fire Extinguishers: Yes
14. Water Sprinklers: Yes
15. CCTV Cameras: Yes
16. Sufficient Security Guards: Yes
17. Fire Safety Valid Date: 30/05/2027
18. Fire Safety Drills/Programs Conducted: Yes





19. Structural & Non-Structural Fire Safety Audits Conducted: Yes
20. Fire Safety/Disaster Management: Yes
21. Student/Teacher Training for Safety/Disaster Preparedness: Yes

The extensive provisions for health, hygiene, and safety are highly commendable. The adequate number of gender-segregated toilets for both students and staff, along with the presence of incinerators and sanitary pad vending machines in girls' toilets, indicates a strong focus on student well-being and menstrual hygiene management. The availability of water purifiers ensures access to safe drinking water.

Comprehensive fire safety measures (alarms, extinguishers, sprinklers, regular drills, and audits) demonstrate proactive risk management. The presence of CCTV cameras and sufficient security guards enhances the overall safety and security of the campus. The regular conduct of safety drills and training for students and teachers is crucial for preparedness in emergencies, significantly mitigating potential risks. A dedicated clinic facility ensures immediate medical attention.

Accessibility Features

The school has made provisions for physically challenged individuals.

1. Ramps for Physically Handicapped: Yes
2. Ramps Availability in Toilets for CWSN: Yes

The presence of ramps for physically challenged individuals and in toilets for Children with Special Needs (CWSN) indicates adherence to inclusive education principles, ensuring that the physical environment is accessible to all students, regardless of their mobility.

Sports and Recreation Facilities

The school provides facilities for physical activity and sports.

1. Playgrounds: 1 (Total Area: 39,000 sq.ft, which is greater than 10,000 sq.ft)
2. Sports Facility: Yes (View SOP for Sports Facility mentioned)
3. Indoor Games Facility: Yes
4. Swimming Pool: No
5. Gymnasium: No





A large playground and general sports facilities are beneficial for outdoor activities and physical education. The indoor games facility provides options for recreation, especially during adverse weather conditions. While the absence of a swimming pool and gymnasium might be a limitation for certain specialized sports programs, the existing facilities support general physical development.

Technology and Connectivity

The school leverages technology for learning and administration.

1. Web Server: Yes
2. School Wi-Fi Enabled: Yes
3. Provision of Web-Based Learning Programs: Yes

The presence of a web server, campus-wide Wi-Fi, and web-based learning programs signifies a digitally forward-thinking approach. This infrastructure supports online learning, digital content delivery, administrative efficiency, and provides students with access to a wealth of online educational resources, crucial in the contemporary educational landscape.

Transport Facilities

The school offers transport services to its students.

1. Transport Facility: Yes
2. Total Number of Buses Owned: 4
3. Total Number of Buses Hired: 0
4. Total Number of Drivers: 8
5. Total Number of Vans/Mini Buses/Matadors: 0
6. Number of Female Attendants for Transport Duty: 4
7. Transport Coordinator: Mr. Milan Shukla (Contact: 8319138445)

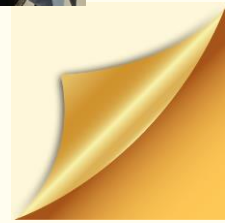
The provision of school-owned buses with dedicated drivers and female attendants for transport duty indicates a commitment to safe and organized student commuting. The presence of female attendants is particularly important for the safety and comfort of female students. A designated transport coordinator ensures efficient management of the fleet and routes.

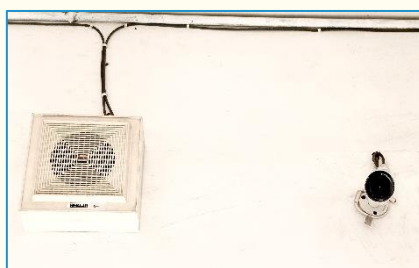
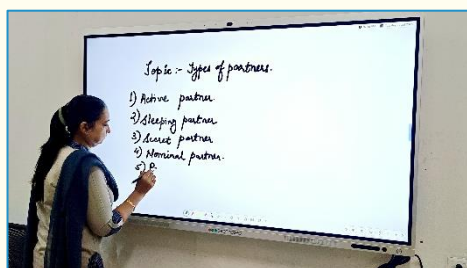


Other Details

1. School Site: Permanent
2. Single Contiguous Plot: Yes
3. Rooms Greater than 500 sq ft: 55
4. Rooms Between 400 to 500 sq ft: 0
5. Rooms Less than 400 sq ft: 0

The permanent and single-plot nature of the school site provides stability and a unified campus environment. The breakdown of room sizes indicates a focus on larger learning spaces, which can be advantageous for various teaching methodologies and student comfort.





Overall Impact Assessment and Recommendations

Graphite Higher Secondary School, Mandideep, appears to possess a robust and well-maintained infrastructure that significantly supports its academic and co-curricular objectives.

Strengths:

1. *Comprehensive Learning Environment:* Ample classrooms, a high number of digital classrooms, and specialized labs provide diverse and effective learning spaces.
2. *Strong Emphasis on Safety and Hygiene:* Extensive provisions for fire safety, security, and sanitation (including menstrual hygiene facilities) are highly commendable.
3. *Digital Integration:* Wi-Fi connectivity, web server, and web-based learning programs align with modern educational trends.
4. *Inclusive Design:* Ramps and accessible toilets demonstrate a commitment to inclusivity.
5. *Well-Managed Transport:* School-owned buses with female attendants enhance student safety during commuting.
6. *Rich Library Resources:* A well-stocked and digitized library promotes reading and research.





Areas for Potential Enhancement/Clarification:

1. *Sports Facilities:* While general sports facilities exist, the absence of a swimming pool and gymnasium might limit opportunities for advanced athletic training. The school could explore partnerships or future development plans for these facilities if deemed necessary for student development or competitive sports.
2. *Cyber Nodal Officer:* It is recommended to assign a specific individual as the Cyber Nodal Officer to ensure proper oversight of cybersecurity policies and online safety protocols.

Briefly, School's infrastructure is largely excellent and well-aligned with the requirements of a modern CBSE-affiliated institution. The detailed documentation reflects a systematic approach to facility management and safety, creating a conducive environment for student learning and development. Continuous review and minor enhancements in the identified areas will further strengthen the school's foundational support for its educational mission.

In short, chapter meticulously details the current status of Graphite Higher Secondary School by examining its student body, teaching staff, and infrastructure. It begins by conceptually framing the symbiotic relationship between students and teachers as indispensable pillars of the educational ecosystem, with students as the dynamic core and teachers as expert facilitators. The chapter then presents a quantitative overview of student strength, revealing a discernible growth from 1748 in 2023-24 to 1824 in 2024-25, alongside stable or growing numbers across all grade levels, particularly in higher secondary classes. This growth is interpreted as a validation of educational quality, an expansion of the school's reach, an enrichment of the learning environment through diversity, and a testament to the crucial role of teachers in managing a growing cohort. Following this, the chapter provides a detailed status of the school's infrastructure, highlighting its 12,140 sq. meter single-site campus with three multi-storeyed blocks, 69 learning spaces including 21 digital classrooms, and specialized laboratories for science, mathematics, and computers. The library is well-resourced with 5,000 books and digital access. Crucially, the school demonstrates a strong commitment to health,



hygiene, and safety, with ample gender-segregated toilets, water purifiers, a clinic, comprehensive fire safety systems, CCTV, and accessible ramps for CWSN. Technology integration is robust with Wi-Fi and web-based learning programs, and transport facilities include school-owned buses with female attendants. Overall, the school's infrastructure is deemed excellent and well-aligned with modern CBSE requirements, creating a conducive environment for learning and development, though potential enhancements in specialized sports facilities and the assignment of a Cyber Nodal Officer are noted for future consideration.



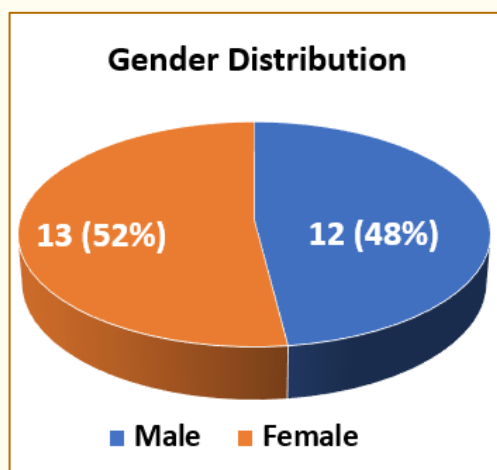
Chapter 4: Respondents Profile

Background

This chapter details the demographic and background characteristics of the various respondent groups who participated in the study. Understanding the profile of the respondents is crucial for interpreting the study's findings, as it provides context regarding the perspectives and experiences represented. The study gathered insights from students, community members, parents, and teachers, each offering a unique lens on the subject matter.

1. Student

The student participant group provides a direct perspective on the school environment.



1.1 Gender

The sampled student consisted of 25 individuals, exhibiting a near-equal distribution between genders. Female students constituted a slight majority, with 13 participants (52%), while male students accounted for 12 participants (48%). This 4 percentage point difference suggests a fairly balanced gender representation within the observed group, indicative of a balanced enrollment rate in the studied group.

1.2 Student's Studying Class

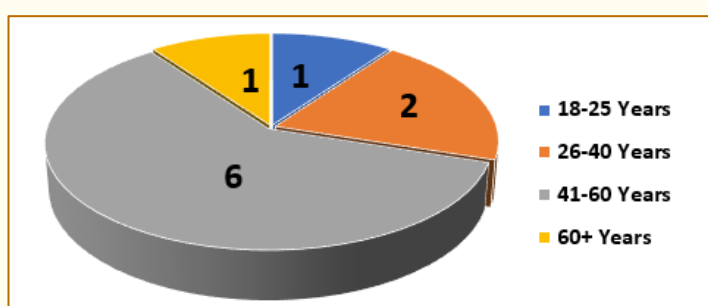
The distribution of students across different classes was remarkably uniform, with an equal number of participants from each grade level.

The data reveals a perfectly even distribution of students across classes VIII through XII, with each grade comprising 20% of the total 25 students. This uniformity is notable

and reflects a deliberate selection to ensure representation from a range of academic stages. The inclusion of students from classes VIII to XII was strategic, as these students have experienced both the new and old school buildings, enabling them to provide informed comparisons regarding infrastructure. Furthermore, all participating students have been enrolled in the school for more than two years, meaning they were enrolled before 2022, ensuring a consistent baseline of experience with the institution.

2. Community Member Respondents

The community member respondents offer an external perspective on the school's standing and impact within the local area.



2.1 Gender

The community member group consisted of 10 participants, with a significant male dominance. Out of the 10 community members, 9 (90%) were male, and only 1 (10%) was female. This indicates a heavily male-dominated representation within this specific respondent category.

2.2 Age Group

The age distribution among community members shows a concentration in the middle-aged bracket. The largest proportion of community members (60%, or 6 out of 10) were between 41 and 60 years old, indicating that the majority were middle-aged. The youngest group (18-25 years) and the oldest group (above 60 years) each accounted for 10% of the respondents. Two individuals (20%) were aged between 26 and 40 years. This distribution suggests that insights from the community were primarily gathered from experienced, established residents.





2.3 Children's Class

The majority of community member respondents were not parents or guardians of children currently attending the school. Of the 10 community members, 8 (80%) reported that they were not parents or guardians of a child currently studying at the school, while only 2 (20%) were. This indicates that the community members' perspectives largely came from individuals without direct parental ties to the current student body. All community members included in the study have resided in the area for over 10 years, ensuring they possess comprehensive knowledge regarding the Graphite School's educational standards, facility conditions, and teacher-student interactions.

3. Parents Respondents

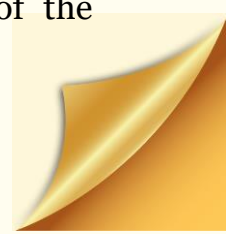
The parent participants offer insights into the school from the perspective of their children's educational experience.

The study involved a total of 10 parent participants, all of whom were male and identified as fathers of students currently enrolled in the school. Regarding the number of children enrolled, 60% of the participating fathers reported having a single child studying at the institution, while the remaining 40% indicated that they had two children attending the school. Furthermore, an analysis of student tenure revealed that the children of 70% of the respondents had been studying at the school for a period exceeding five years. In contrast, the children of the remaining 30% of participants had an enrollment tenure ranging from two to five years.

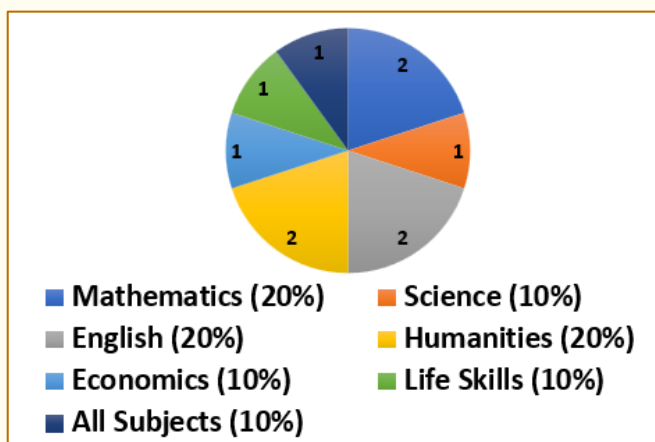
4. Teachers Respondents

The teacher cohort provides an internal perspective on the school's academic environment and operational aspects. The teacher cohort in this study comprised 80% female and 20% male educators. Regarding their teaching assignments, 70% primarily teach high school and higher secondary students, with 20% dedicated to primary classes and 10% to secondary classes. A significant characteristic of these participants is their extensive experience, as all have been teaching at their current school for over five years.

In terms of subject specialization, 20% of the teachers teach Mathematics, and 10% teach Science. English and Humanities subjects are each taught by 20% of the



respondents. Additionally, 10% teach Economics, while another 10% focus on Life Skills. The remaining 10% of teachers teach all subjects.



In short, the student respondents, totaling 25, shows a balanced gender distribution (52% female, 48% male) and an even spread across classes VIII to XII, with all having over two years of enrollment. The 10 community member respondents are predominantly male (90%) and middle-aged (60% between 41-60), with most (80%) not being current school parents but possessing over a decade of local residency, ensuring comprehensive knowledge of the school. The 10 parent participants are all male fathers, with 60% having one child and 40% having two children enrolled, and their children's tenure at the school is largely long-term, with 70% exceeding five years. Finally, the teacher cohort is 80% female and 20% male, with 70% teaching high school/higher secondary, and the remainder split between primary (20%) and secondary (10%) classes; all teachers have over five years of experience, and their subject specializations include Mathematics (20%), Science (10%), English (20%), Humanities (20%), Economics (10%), Life Skills (10%), and all subjects (10%).





Chapter 5: Academic Performance and Learning Outcome

Background

This chapter delves into the academic performance and learning outcomes observed within the school, drawing insights from the perspectives of its key stakeholders: students, parents, community members, and teachers. By analyzing their perceptions, we aim to understand how the academic performance has evolved over the past two years and its impact on various aspects of learning and development. This comprehensive approach allows for a multi-faceted view of the school's effectiveness in fostering academic growth and enhancing the overall learning experience. Educational research consistently highlights the importance of multi-stakeholder perspectives in evaluating school effectiveness, as each group offers unique insights into the learning ecosystem [Davies & Hughes, 2017].

Student Perceptions

This section provides an academic analysis and interpretation of student perceptions regarding various aspects of their educational experience over the past two years, as presented in the provided tables. The data offers insights into changes in academic performance, interest in learning, lesson comprehension, participation opportunities, and perceived improvements in teaching methods.

Academic Performance

The data on students perceived academic performance over the last two years indicates a predominantly positive trend. Of the 25 student respondents, a significant majority reported an improvement in their academic standing. Specifically, 11 students (44%) felt their performance was "Much better," while 12 students (48%) perceived it as "Slightly better." Only a small minority of 2 students (8%) reported their academic performance to be "About the same." This suggests that the students, as a collective, recognize an enhancement in their scholastic achievements, which could be attributed to various factors such as improved teaching methodologies, enhanced learning environments, or increased student engagement [Hattie, 2009]. The combined 92% positive response (much better or slightly better) strongly indicates a perceived upward trajectory in academic outcomes.



Table 5.1: Academic Performance by Student

Response	Frequency	Percentage
Much better	11	44
Slightly better	12	48
Same	2	8
Total	25	100

Interest in Learning New Things

Student interest in learning new concepts has also shown a marked increase compared to two years prior. A substantial 21 students (84%) reported being "Yes, much more" interested in learning new things, while the remaining 4 students (16%) were "Yes, somewhat" more interested. This unanimous positive shift in learning interest is a critical finding, suggesting that the educational environment or pedagogical approaches have become more stimulating and engaging for the students. Such heightened interest is foundational for deeper learning and sustained academic curiosity, directly impacting motivation and retention of knowledge [Deci & Ryan, 2000].

Table 5.2

Learning New Things by Students

Response	Frequency	Percentage
Yes Much More	21	84
Yes Somewhat	4	16
Total	25	100

Ability to Understand Lessons

The ability of students to understand their lessons better now than two years ago also reflects a strong positive trend. A total of 22 students (88%) reported improved comprehension, with 12 students (48%) indicating "Yes, much better" and 10 students (40%) stating "Yes, somewhat." A small fraction of students found their understanding



"About the same" (2 students, 8%), and only 1 student (4%) felt they understood "No, less." This overwhelmingly positive perception of improved lesson comprehension suggests that teaching strategies or instructional support mechanisms have become more effective in facilitating student learning and knowledge acquisition [Wiliam, 2011].

Table 5.3

Ability to understand lesson

Response	Frequency	Percentage
Yes Much Better	12	48
Yes Somewhat	10	40
No Same	2	8
No Less	1	4
Total	25	100

Opportunities for Participation in Discussion

Students perceive a significant increase in opportunities to participate in discussions. Out of 25 respondents, 15 students (60%) felt they had "Yes, much more" opportunities, and 9 students (36%) reported "Yes, somewhat" more opportunities. Only 1 student (4%) indicated "No, about the same." This data highlights a positive shift towards more interactive and participatory learning environments. Increased opportunities for discussion can foster critical thinking, communication skills, and deeper engagement with course material, contributing to a more dynamic educational experience [Mercer & Littleton, 2007].



Table 5.4

Opportunities for participation in Discussion

Response	Frequency	Percentage
Yes Much More	15	60
Yes Somewhat	9	36
No Same	1	4
Total	25	100

Improvement in Teaching Methods

A substantial majority of students have noticed improvements in the teaching methods employed by their instructors. Specifically, 15 students (60%) reported "Significant Improvement," while 10 students (40%) noted "Some Improvement." This unanimous positive feedback regarding teaching methods is highly indicative of successful pedagogical reforms or continuous professional development among the teaching staff. Perceived improvements in teaching directly correlate with enhanced lesson comprehension, increased student interest, and better academic performance, reinforcing the interconnectedness of these educational factors [Darling-Hammond, 2006].

Table 5.5

Improvement in Teaching Methods

Response	Frequency	Percentage
Significant Improvement	15	60
Some Improvement	10	40
Total	25	100





Analysis & Interpretation

The analysis of student perceptions reveals a consistently positive outlook on their educational experience over the past two years. Students report improvements across all surveyed areas: academic performance, interest in learning, lesson comprehension, opportunities for participation, and the quality of teaching methods. These findings collectively suggest that the school has successfully implemented initiatives or undergone changes that have significantly enhanced the learning environment and student outcomes. The strong positive correlations across these metrics imply that improvements in teaching methodologies and increased participatory opportunities are likely contributing factors to the observed gains in academic performance and student engagement [Fullan, 2016].

Parent Perception

This section provides an academic analysis and interpretation of parent perceptions regarding their child's academic performance, interest in learning, overall benefit from the school, improvements in teaching methods, and increased opportunities for participation. The data is derived from a sample of 10 parent respondents, offering valuable insights into the school's impact from a parental viewpoint. Parental involvement and perception are crucial, as they often reflect the real-world impact of school policies on families [Epstein, 2001].

Child's Academic Performance

Parents overwhelmingly perceive a positive change in their child's academic performance. Out of 10 parent respondents, 8 (80%) reported their child's performance as "Much better," while the remaining 2 (20%) indicated "Slightly better." This unanimous positive feedback (100% reporting improvement) suggests a strong parental belief in the school's effectiveness in enhancing their children's academic outcomes. This perception could be influenced by various factors, including the quality of instruction, the learning environment, or the support systems in place [Henderson & Mapp, 2002].



Table 5.6

Child's Academic Performance

Response	Frequency	Percentage
Much better	8	80
Slightly better	2	20
Total	10	100

Child's Shown Interest in Learning

Parents observe varied but generally positive indicators of their child's increased interest in learning. The responses highlight several facets of enhanced engagement. 2 parents (20%) noted an increased inclination in studies. 2 parents (20%) observed improved academic results. 1 parent (10%) reported an increase in creativity and curiosity. 2 parents (20%) saw an increase in their child's confidence. 1 parent (10%) noted an improvement in self-learning. 2 parents (20%) perceived better understanding in their child rather than previous year.

This distribution suggests that while there isn't a single dominant area, parents recognize multiple positive changes in their child's approach to learning, ranging from improved academic results and confidence to increased self-directed learning and understanding. This multi-faceted improvement indicates a holistic development in learning interest, which is vital for long-term educational success [Ryan & Grolnick, 1986].

Table 5.7

Child's Shown Interest in Learning

Response	Frequency	Percentage
Inclination towards studies	2	20
Result is better	2	20
Creativity and curiosity	1	10
Increase self- confidence	2	20
Interest in Self-learning	1	10
Enhance Understanding	2	20
Total	10	100



Child's Overall Benefit from School

Parents largely feel their child is significantly benefiting from the school. Eight parents (80%) responded "Yes, much," indicating a high level of satisfaction with the overall positive impact the school has on their child. One parent (10%) responded "Yes, some," while another (10%) did not provide a response. This strong endorsement suggests that the school is meeting parental expectations regarding the comprehensive development and well-being of their children [Cotton & Wikelund, 1989].

Table 5.8
Overall benefit from School

Response	Frequency	Percentage
Yes, much	8	80
Yes, some	1	10
No reply	1	10
Total	10	100

Improvement in Teaching Methods

All parent respondents (100%, or 10 parents) reported noticing "Significant" improvement in the teaching methods employed by the school. This unanimous perception is a powerful indicator of successful pedagogical advancements or reforms within the institution. Such a high level of positive recognition from parents suggests that the changes in teaching strategies are noticeable and are having a discernible positive effect on the learning experience, aligning with the positive perceptions of academic performance and learning interest [Marzano, 2007].

Increased Participation in Academic Activities

Parents also largely believe their child has more opportunities to participate in academic activities. Seven parents (70%) responded "Yes, much," indicating a substantial increase in participation opportunities for their children. Three parents (30%) responded "Yes, some." This collective perception of enhanced participatory avenues suggests that the school is fostering an environment where students are encouraged to engage more actively in learning processes, discussions, or





extracurricular activities, contributing to their holistic development [Finn & Voelkl, 1993].

Table 5.9
Increased Participation in Academic Activities

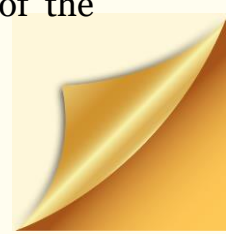
Response	Frequency	Percentage
Yes, much	7	70
Yes, some	3	30
Total	10	100

Analysis and Interpretation

The analysis of parent perceptions reveals a consistently positive and highly satisfied view of the school's performance and its impact on their children. Parents unanimously report improvements in their child's academic performance and universally acknowledge significant improvements in teaching methods. They also observe diverse indicators of increased learning interest in their children and largely perceive that their children are benefiting substantially from the school, coupled with increased opportunities for participation. These findings collectively underscore a strong sense of approval from the parental community, suggesting that the school's educational strategies and environment are effectively meeting and exceeding parental expectations. The high degree of consensus across multiple indicators reinforces the perceived success of the school's efforts in fostering a positive and effective learning experience for its students [Wang & Sheikh-Khalil, 2014].

Community Member Perception

This section presents an academic analysis and interpretation of community members' perceptions regarding the school's academic performance, learning outcomes, and overall educational quality. The data, derived from a sample of 10 community respondents, offers an external yet informed perspective on the school's standing within the local area. The relationship between schools and their communities is symbiotic, with community perceptions often reflecting the broader impact and value of the educational institution [Drysedale et al., 2017].



Quality of Education

Community members overwhelmingly believe that the overall quality of education at the school has improved. Of the 10 respondents, 9 (90%) indicated that the quality had improved "Significantly," while 1 respondent (10%) noted a "Moderately" improvement. This strong consensus suggests a highly positive external perception of the school's educational standards. Such a high degree of agreement from community members, particularly given their long-term residency in the area as noted in the "Respondents' Profile" chapter, lends significant credibility to the perceived enhancements in educational quality [Coleman et al., 1966].

Table 5.10

Quality of Education

Response	Frequency	Percentage
Significantly	9	90
Moderately	1	10
Total	10	100

Students' Academic Performance

Community members largely perceive that students from this school are performing better academically. Nine out of 10 respondents (90%) stated that students are performing better "Yes, frequently," while 1 respondent (10%) indicated "Yes, occasionally." This strong belief in improved student academic performance from an external viewpoint reinforces the positive self-perceptions reported by students and parents. It suggests that the school's efforts to enhance learning outcomes are visible and acknowledged by the broader community [Epstein & Sanders, 2002].

Table 5.11

Student's Academic Performance by Community Member

Response	Frequency	Percentage
Yes, frequently	9	90
Yes, occasionally	1	10
Total	10	100





Future Role of School

The community also believes the school is now better at preparing students for future. A substantial 9 respondents (90%) answered "Yes, much," indicating a significant improvement in the school's ability to prepare students. The remaining 1 respondent (10%) answered "Yes, somewhat." This perception likely encompasses preparedness for higher education, future careers, or general life skills. The high positive response rate suggests that the community recognizes the school's enhanced role in equipping students for their future endeavors [Conley, 2007].

Table 5.12

Future Role of School

Response	Frequency	Percentage
Yes, much	9	90
Yes, somewhat	1	10
Total	10	100

Level of Student's Confidence

Community members have also noticed a positive change in the confidence or enthusiasm of students. Nine respondents (90%) observed "Yes, more" confidence or enthusiasm, with only 1 respondent (10%) noting "No, less." This observation from the community is crucial as it speaks to the holistic development of students beyond just academic metrics. Increased confidence and enthusiasm can be indicators of a more supportive and engaging school environment that fosters personal growth and positive attitudes towards learning [Dweck, 2006].



Table 5.13
Level of Student's Confidence

Response	Frequency	Percentage
Yes, more	9	90
No, less	1	10
Total	10	100

Analysis and Interpretation

The analysis of community member perceptions reveals an overwhelmingly positive external view of the school's progress and impact. There is a near-unanimous belief in the "Significantly" improved overall quality of education and the "frequently" better academic performance of students. Furthermore, community members strongly perceive that the school is "much" better at preparing students for the future and have observed "more" confidence and enthusiasm among them. This consistent positive feedback across all surveyed aspects from an external stakeholder group underscores the school's successful efforts in enhancing its educational offerings and fostering a positive learning environment, which is clearly recognized and appreciated by the local community [Bryk & Schneider, 2002].

Teacher Perception

This section provides an academic analysis and interpretation of teachers' perceptions regarding various aspects of the school's academic environment, student engagement, access to resources, and the impact of recent changes. The data, derived from a sample of 10 teacher respondents, offers crucial insights from the perspective of those directly involved in the educational process. Teachers' perceptions are vital as they are on the front lines of education delivery and directly experience the impact of school-wide changes [Guskey, 2002].

Academic Performance

All 10 teacher respondents (100%) reported a "Significant" improvement in the academic performance of students over the last two years. This unanimous positive perception from the teaching staff is a strong indicator of successful educational



strategies and interventions. It suggests that teachers are observing tangible gains in student learning outcomes, which aligns with the positive perceptions reported by students and parents [Black & Wiliam, 1998].

Teachers attributed the improved academic performance to several key factors. 2 teachers (20%) cited increased student participation as a reason. 1 teacher (10%) mentioned ongoing efforts. 3 teachers (30%) provided a response that was cut off but likely indicated an increase in something positive. 4 teachers (40%) pointed to increased positive outcomes, potentially referring to a positive learning environment or student attitudes.

The most frequently cited reason (40%) points to an overall increase in positive aspects, suggesting a holistic improvement in the learning environment. Increased participation is also a notable factor, aligning with student and parent perceptions of more discussion opportunities [Fredricks et al., 2004].

Increase in Student Enthusiasm

All 10 teacher respondents (100%) reported noticing a "Yes, significant" increase in student enthusiasm. This unanimous observation from teachers underscores a positive shift in student attitudes towards learning. Increased enthusiasm is a vital component of effective learning, leading to greater engagement and potentially better academic outcomes [Skinner & Belmont, 1993].

Teachers provided diverse reasons for the increase in student enthusiasm. 1 teacher (10%) attributed it to students asking more questions in the class. 4 teachers (40%) cited the use of audio-visual aids during the class. 1 teacher (10%) mentioned an increase in an unspecified factor. 3 teachers (30%) again noted increased participation in the class with positive manner. 1 teacher (10%) did not provide a specific reason.

The most prominent reason (40%) is the use of audio-visual aids, suggesting that modern teaching tools are effectively capturing student interest. Increased participation (20%) also plays a role, reinforcing its importance in fostering engagement [Mayer, 2009].





Students' better access to resources

All 10 teacher respondents (100%) feel that students now have "Yes, significant" better access to resources. This unanimous agreement highlights a successful improvement in the availability and accessibility of learning materials and tools for students. Enhanced resource access is critical for supporting diverse learning styles and promoting independent study [Kozma, 2003].

Teachers identified several reasons for improvement to accessing resources. 1 teacher (10%) cited overall improvement. 4 teachers (40%) mentioned "So many facilities" (likely referring to new or improved facilities). 4 teachers (40%) attributed it to audio-visual resources. 1 teacher (10%) mentioned "Through internet" or "interactive board."

The primary drivers for better resource access are the increased availability of facilities and the effective use of audio-visual resources, each cited by 40% of teachers. This suggests a dual approach to resource enhancement, focusing on both physical infrastructure and digital learning tools.

Changes enabled for academic outcome

A strong majority of teachers believe that recent changes have enabled them to teach better. Nine teachers (90%) responded "Yes, significant," while 1 teacher (10%) responded "Yes, some." This indicates that the implemented changes, whether in curriculum, technology, or professional development, are perceived by teachers as genuinely facilitating more effective instruction [Spillane et al., 2002].

Teachers provided reasons for how recent changes have improved their teaching. 2 teachers (20%) cited their experience for new infrastructure facility with the teaching aid. 1 teacher (10%) mentioned the inclusion of a pleasant atmosphere of school. 3 teachers (30%) mentioned "Teacher's access" (likely to resources or training). 3 teachers (30%) mentioned "Through New Teaching Aid" (likely new methods or technology). 1 teacher (10%) did not provide a specific reason.

The most common reasons (30% each) are improved teacher access to resources/training and the introduction of new methods or technology. This highlights the importance of supporting teachers with both professional development and innovative tools to enhance their pedagogical effectiveness [Fullan, 2007].





Students Improved Critical Thinking

All 10 teacher respondents (100%) believe students are demonstrating "Yes, significant" improved critical thinking skills. This unanimous observation is a testament to the school's success in fostering higher-order thinking abilities. Improved critical thinking is a crucial outcome of quality education, enabling students to analyze information, solve problems, and make informed decisions [Ennis, 1985].

Change in Teaching Methods

All 10 teacher respondents (100%) reported "Improved" changes in teaching methods. This aligns perfectly with the student and parent perceptions of improved teaching. The unanimous agreement from teachers themselves confirms that significant and positive shifts have occurred in pedagogical practices within the school [Stigler & Hiebert, 1999].

Analysis and Interpretation

The analysis of teacher perceptions reveals an overwhelmingly positive internal assessment of the school's progress and its impact on student learning and engagement. Teachers unanimously report significant improvements in student academic performance, enthusiasm, access to resources, and critical thinking skills. They attribute these gains to factors such as increased student participation, the effective use of audio-visual aids, improved facilities, and enhanced teacher access to resources and new methodologies. The consistent and unanimous positive feedback across all surveyed aspects from the teaching staff strongly indicates that the school has successfully implemented comprehensive educational reforms that are yielding tangible and positive outcomes in the learning environment and student development. These internal perceptions align remarkably well with the positive views expressed by students, parents, and community members, creating a cohesive narrative of significant improvement within the institution [Leithwood et al., 2004].





In short, the collective perceptions of students, parents, community members, and teachers paint a consistently positive picture of the school's academic progress and learning outcomes. Students overwhelmingly report improved academic performance, increased interest in learning new things, better lesson comprehension, and more opportunities to participate in discussions, all while noticing significant improvements in teaching methods. Parents echo these sentiments, observing substantial improvements in their children's academic performance, diverse indicators of increased learning interest, and a strong overall benefit from the school, along with a universal acknowledgment of improved teaching methods and increased participation in academic activities. Community members, from their external vantage point, also perceive a significantly improved quality of education, better academic performance among students, enhanced student preparedness for the future, and a noticeable increase in student confidence and enthusiasm. Teachers, as internal stakeholders, unanimously confirm significant improvements in student academic performance, enthusiasm, access to resources, and critical thinking skills, attributing these gains to factors like increased student participation, effective use of audio-visual aids, improved facilities, and better access to resources and new methodologies. This alignment across all respondent groups strongly suggests that the school has successfully implemented comprehensive educational reforms, leading to tangible and positive outcomes in the learning environment and student development.



Chapter 6: Perception on Infrastructure Facility

Background

This chapter focuses on understanding the perceptions of various stakeholders regarding the school's infrastructure, resources, and facilities. By examining the views of students, parents, community members, and teachers, we aim to gain a comprehensive insight into how the physical and material aspects of the school environment are perceived, and whether recent efforts to enhance these areas have been successful. This analysis is crucial for evaluating the school's commitment to providing a conducive and well-equipped learning space, as a robust infrastructure is widely recognized as a foundational element for effective education [Earthman, 2004].

Student Perception

This section provides an academic analysis and interpretation of student perceptions regarding the school's infrastructure, resources, and facilities. The data, derived from a sample of 25 student respondents, offers direct insights into their experiences with the physical and material aspects of their learning environment. Student perceptions are particularly valuable as they are the primary users of these facilities [Schneider, 2002].

Availability of Learning Materials

Students overwhelmingly perceive an increased availability of learning materials. Out of 25 respondents, 19 students (76%) reported "Yes, many more" learning materials, while 6 students (24%) indicated "Yes, a few more." This unanimous positive perception suggests that the school has successfully enhanced its provision of educational resources, which is crucial for supporting diverse learning needs and enriching the curriculum. The increased access to materials can directly contribute to improved academic performance and interest in learning, as noted in previous analyses [Slavin, 2018].



Table 6.1

Availability of Learning Material

Response	Frequency	Percentage
Yes, many more	19	76
Yes, a few more	6	24
Total	25	100

Improvements in School Facilities

Students have widely noticed improvements in the overall school facilities. Eighteen students (72%) reported "Yes, significant improvement," and 7 students (28%) noted "Yes, some improvement." This collective positive feedback (100% reporting improvement) indicates that the school's efforts to upgrade or maintain its physical infrastructure have been well-received and are discernible to the student body. Improved facilities can create a more conducive and comfortable learning environment, positively impacting student well-being and engagement [Lackney & Jacobs, 2002].

Table 6.2

Improvement in School Facility

Response	Frequency	Percentage
Yes, significant improvement	18	72
Yes, some improvement	7	28
Total	25	100

Access to Drinking Water Facilities

Students largely perceive better access to drinking water facilities. Nineteen students (76%) reported "Yes, much better" access, and 5 students (20%) indicated "Yes, somewhat better." Only 1 student (4%) felt access was "No, about the same." This strong positive trend suggests that the school has made considerable strides in ensuring adequate and accessible drinking water for its students, a fundamental aspect of health and well-being within the school environment [UNICEF, 2015].



Table 6.3
Drinking Water Facility

Response	Frequency	Percentage
Yes, much better	19	76
Yes, somewhat	5	20
No, about the same	1	4
Total	25	100

Cleanliness in Toilets

Student perceptions regarding the cleanliness of school toilets show a positive, though less unanimous, trend compared to other facilities. Ten students (40%) reported "Yes, much better" cleanliness, while 15 students (60%) indicated "Yes, somewhat better." While all students perceive some level of improvement, the distribution suggests that while efforts have been made, there might be room for further enhancement to reach the "much better" standard for a larger proportion of students. Clean and hygienic facilities are crucial for student comfort and health, directly impacting attendance and learning focus [WaterAid, 2014].

Table 6.4
Cleanliness in Toilets

Response	Frequency	Percentage
Yes, much better	10	40
Yes, somewhat	15	60
Total	25	100

Analysis and Interpretation

The analysis of student perceptions concerning school infrastructure, resources, and facilities reveals a consistently positive outlook. Students report universal improvements in the availability of learning materials and overall school facilities, indicating successful investments and efforts in these. Access to drinking water facilities





is also perceived as significantly better by almost all students. While toilet cleanliness shows improvement across the board, there is a slightly more varied perception regarding the degree of improvement, suggesting ongoing efforts might be beneficial. Collectively, these findings highlight that the school has made substantial progress in enhancing its physical environment and resource provision, which directly contributes to a more supportive and effective learning experience for its students [Fisher & Ruegg, 2011].

Parent Perception

This section provides an academic analysis and interpretation of parent perceptions regarding the school's infrastructure and other facilities. The data, derived from a sample of 10 parent respondents, offers valuable insights into how parents view the physical environment and amenities provided by the school, often based on their children's feedback. Parental perceptions are a key indicator of school quality and effectiveness, influencing enrollment and community support [Epstein, 2001].

Improvement in Infrastructure

Parents overwhelmingly perceive significant improvements in the school's infrastructure, largely informed by their children's feedback. Out of 10 parent respondents, 9 (90%) rated the improvement as "Excellent improvement," while 1 respondent (10%) indicated "Good improvement." This near-unanimous positive assessment highlights a strong parental belief that the school's physical environment has undergone substantial and beneficial upgrades. This perception is crucial as it reflects the direct experience of students, which parents then interpret as a positive development [Henderson & Mapp, 2002].

Table 6.5

Improvement in Infrastructure

Response	Frequency	Percentage
Excellent improvement	9	90
Good improvement	1	10
Total	10	100

Necessary Resources

Parents believe that the school is now significantly better at providing necessary resources. All 10 parent respondents (100%) answered "Yes, significant," indicating a complete consensus on this matter. This finding is highly significant, as it suggests that the school has successfully addressed resource provision, which is fundamental for effective learning. The unanimous agreement underscores a high level of parental confidence in the school's capacity to equip students with the materials and tools they need for their education [OECD, 2016].

Improvements in School Facilities

Parents have universally observed improvements in school facilities. All 10 parent respondents (100%) reported "Yes, significant" improvements. This aligns perfectly with the perceptions of students and further reinforces the notion that the school has made tangible and noticeable enhancements to its physical amenities. Such widespread positive observation from parents indicates that the investments in facilities are not only present but are also positively impacting the overall perception of the school's learning environment [Cotton & Wikelund, 1989].

Analysis and Interpretation

The analysis of parent perceptions regarding school infrastructure and facilities reveals an exceptionally positive and consistent outlook. Parents unanimously believe that the school has made significant improvements in its infrastructure, is now highly effective at providing necessary resources, and has universally enhanced its facilities. This strong consensus across all surveyed aspects from the parental community suggests that the school's efforts to upgrade its physical environment and resource provision have been highly successful and are well-recognized. These improvements likely contribute to a more conducive and supportive learning atmosphere, which in turn fosters positive academic outcomes and overall student well-being, as reflected in parental satisfaction [Wang & Sheikh-Khalil, 2014].





Community Member Perception

This section provides an academic analysis and interpretation of community members' perceptions regarding the school's infrastructural facilities, resources, and overall environment. The data, derived from a sample of 10 community respondents, offers an external yet informed perspective on the physical aspects of the school. Community perceptions are vital as they reflect the school's broader impact and integration within its local context [Drysdale et al., 2017].

Infrastructural Facility Improvement

Community members overwhelmingly rate the improvement in the school's infrastructural facilities positively. From their observations or what they have heard, 8 respondents (80%) rated the improvement as "Excellent improvement," while 2 respondents (20%) indicated "Good improvement." This unanimous positive assessment (100% reporting improvement) from the community underscores a strong external recognition of significant upgrades to the school's physical infrastructure. This perception is particularly noteworthy given that these community members have resided in the area for over 10 years, providing them with a long-term perspective on the school's development [Coleman et al., 1966].

Table 6.6

Infrastructural Facility Improvement

Response	Frequency	Percentage
Excellent improvement	8	80
Good improvement	2	20
Total	10	100

Belief in Better Facilities in School

Community members largely believe the school now has better facilities for students. Nine respondents (90%) answered "Yes, much better," indicating a strong conviction that the school's amenities have significantly improved for the benefit of students. The remaining 1 respondent (10%) answered "Yes, somewhat better." This high level of



agreement suggests that the enhancements to student facilities are widely recognized and appreciated by the broader community, contributing to a positive image of the school [Epstein & Sanders, 2002].

Table 6.7

Belief in Better Facilities in School

Response	Frequency	Percentage
Yes, much better	9	90
Yes, somewhat	1	10
Total	10	100

Information of New Resources

All community members are definitively aware of or have seen new resources like computer labs. All 10 respondents (100%) answered "Yes, definite." This unanimous awareness highlights successful communication or visible implementation of new technological resources within the school. The introduction of such resources is a key indicator of modernization and an enhanced learning environment, and its recognition by the community reflects the school's commitment to providing up-to-date educational tools [Kozma, 2003].

Appeal of the School Environment

Community members largely feel that the school environment generally looks more appealing now. Nine respondents (90%) answered "Yes, much more," indicating a strong perception of improved aesthetics and overall attractiveness. Only 1 respondent (10%) stated "No, less." This positive shift in the visual appeal of the school environment is important as it contributes to a welcoming atmosphere for students, staff, and visitors alike, and can positively influence the school's reputation within the community [Sanoff, 2001].

Analysis and Interpretation

The analysis of community member perceptions regarding school infrastructure and facilities reveals an overwhelmingly positive and consistent external view. Community





members unanimously acknowledge significant improvements in infrastructural facilities, largely believe in the presence of much better student facilities, and are definitively aware of new resources like computer labs. Furthermore, almost all perceive the school environment as much more appealing. This strong consensus across all surveyed aspects from an external stakeholder group underscores the school's successful efforts in enhancing its physical environment and resource provision. These improvements are clearly visible and appreciated by the local community, contributing to a positive reputation and a more conducive learning atmosphere [Bryk & Schneider, 2002].

Teacher Perception

This section provides an academic analysis and interpretation of teachers' perceptions regarding the school's infrastructural facilities, resources, and overall environment. The data, derived from a sample of 10 teacher respondents, offers crucial internal insights into the improvements and current state of the school's physical and material assets. Teachers, as direct users and facilitators within the school environment, provide an invaluable perspective on the functionality and impact of infrastructure [Guskey, 2002].

Improvement in Infrastructural Facility

Teachers overwhelmingly rate the improvement in the school's infrastructural facilities very highly. Out of 10 teacher respondents, 9 (90%) rated the improvement as "Excellent improvement," while 1 respondent (10%) indicated "Good improvement." This near-unanimous positive assessment from the teaching staff signifies a strong internal recognition of substantial and beneficial upgrades to the school's physical infrastructure. This perception is particularly valuable as teachers directly interact with these facilities daily [Earthman, 2004].



Table 6.8

Improvement in Infrastructural Facility

Response	Frequency	Percentage
Excellent improvement	9	90
Good improvement	1	10
Total	10	100

Increase in Availability of Modern Teaching Aids

Teachers have largely observed an increase in the availability of modern teaching aids. Nine teachers (90%) reported "Yes, significant" increase, and 1 teacher (10%) noted "Yes, moderate" increase. This strong positive trend indicates that the school has made considerable efforts to equip its classrooms and teachers with contemporary tools that can enhance the learning experience. The availability of modern teaching aids is crucial for implementing innovative pedagogical methods and keeping pace with educational advancements [Darling-Hammond, 2006].

Table 6.9

Availability of Modern Teaching Aid

Response	Frequency	Percentage
Yes, significant	9	90
Yes, moderate	1	10
Total	10	100

Status of School Playground

Teachers unanimously perceive that the access to and condition of the school playground is "Much better." All 10 teacher respondents (100%) provided this response. This complete consensus highlights a successful improvement in a crucial aspect of student well-being and physical activity. A well-maintained and accessible playground is vital for students' holistic development, providing space for recreation and physical education [Pellegrini & Bohn, 2005].





Improvements in Classroom Environment

Teachers report notable improvements in the classroom environment. Eight teachers (80%) indicated "Yes, excellent improvements," while 2 teachers (20%) noted "Yes, good improvements." This unanimous positive feedback regarding classroom conditions such as lighting and ventilation suggests that the school has invested in creating more comfortable and conducive learning spaces. An optimal classroom environment can significantly impact student concentration, health, and overall learning effectiveness [Lackney & Jacobs, 2002].

Table 6.10

Improvements in Classroom Environment

Response	Frequency	Percentage
Yes, excellent improvements	8	80
Yes, good improvements	2	20
Total	10	100

Overall School Environment Appeal

Teachers unanimously feel that the overall school environment looks "Yes, much" more appealing now. All 10 teacher respondents (100%) provided this response. This complete consensus on the enhanced aesthetic and general appeal of the school environment is a strong indicator of successful efforts in creating a welcoming and positive atmosphere. A visually appealing and well-maintained school environment can positively influence morale, pride, and the overall learning experience for both students and staff [Sanoff, 2001].

Analysis and Interpretation

The analysis of teacher perceptions regarding school infrastructure and facilities reveals an overwhelmingly positive and consistent internal view. Teachers unanimously rate the improvements in infrastructural facilities as either "Excellent" or "Good," and universally perceive "Much better" access to and condition of the school playground. They also report a significant increase in the availability of modern teaching aids and





notable improvements in classroom environments, such as lighting and ventilation. Furthermore, all teachers feel that the overall school environment is now "much" more appealing. This strong consensus across all surveyed aspects from the teaching staff underscores the school's successful investments and efforts in enhancing its physical environment and resource provision, which directly contributes to a more effective and supportive teaching and learning experience [Leithwood et al., 2004].

In short, the perceptions of students, parents, community members, and teachers consistently highlight significant improvements in the school's infrastructure and facilities. Students universally report increased availability of learning materials, noticeable improvements in overall school facilities, and better access to drinking water, with all perceiving some level of improvement in toilet cleanliness. Parents, often based on their children's feedback, overwhelmingly believe in excellent improvements in infrastructure, the school's enhanced ability to provide necessary resources, and universally observed improvements in facilities. Community members from the surrounding area also unanimously acknowledge significant upgrades to infrastructure, believe in much better student facilities, are aware of new resources like computer labs, and find the school environment much more appealing. Teachers, who interact with the facilities daily, unanimously rate infrastructural improvements as excellent or good, perceive much better access to and condition of the playground, note a significant increase in modern teaching aids, observe excellent or good improvements in classroom environments, and universally feel the overall school environment is much more appealing. This strong, consistent positive feedback across all groups underscores the school's successful investments and efforts in enhancing its physical environment and resource provision, which are clearly recognized and contribute to a more effective and supportive teaching and learning experience for everyone.





Chapter 7: Perceived Impact of School Transformation

Background

This chapter explores how various groups perceive the changes that have occurred within the school environment, focusing on the impact of improvements in infrastructure and overall enhancements. By gathering insights from students, parents, teachers, and community members, we aim to understand the broad effects of these transformations on the learning experience, well-being, and the school's standing within the wider community. This comprehensive approach provides a holistic view of the success and areas for continued development stemming from the school's recent changes. The perception of stakeholders is crucial in evaluating the success of educational reforms, as it reflects the lived experiences and perceived value of the changes implemented [Fullan, 2016].

Student Perception

This section provides an academic analysis and interpretation of student perceptions regarding the changes in the school environment, focusing on the impact of infrastructural improvements and overall environmental enhancements. The data, derived from a sample of 25 student respondents, offers direct insights into how these changes have personally affected their learning experience and well-being. Student voices are particularly important as they are the direct beneficiaries and daily inhabitants of the school environment [Cook-Sather, 2006].

Condition of Classrooms

Students largely perceive a significant improvement in the condition of their classrooms compared to two years ago. Fifteen students (60%) reported the condition as "Much better," while 10 students (40%) indicated "Slightly better." This unanimous positive perception suggests that the efforts to upgrade classroom environments, likely including elements such as lighting, ventilation, and furniture, have been well-received and are directly impacting students' daily learning spaces. A conducive classroom environment is known to positively influence student engagement and academic performance [Lackney & Jacobs, 2002].





Table 7.1
Condition of Classroom

Response	Frequency	Percentage
Much better	15	60
Slightly better	10	40
Total	25	100

Overall School Improvement

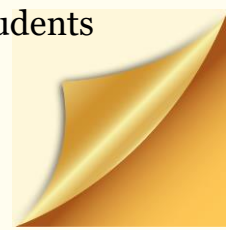
Students overwhelmingly feel that the school has improved overall in the last two years. Twenty-three students (92%) responded "Yes, a lot," while 2 students (8%) responded "Yes, somewhat." This near-unanimous positive sentiment indicates a strong recognition among students that the school has undergone substantial and beneficial transformations, encompassing various aspects beyond just academic performance. This broad positive perception suggests a successful holistic improvement strategy [Bryk & Schneider, 2002].

Table 7.2
Overall School Improvement

Response	Frequency	Percentage
Yes, a lot	23	92
Yes, somewhat	2	8
Total	25	100

Changes in the School

Students identified several positive changes, with a clear emphasis on physical infrastructure and environment. Respondents opined that the changes in big sports ground, adequate furniture in classroom and lab. This was the most frequently cited positive change, mentioned by 9 students (36%). This highlights the importance of recreational and well-equipped learning spaces for students [Earthman, 2004]. 5 students (20%) valued the improved cleanliness and peaceful atmosphere. 7 students





(28%) appreciated the focus on practical skills and updated curriculum. 1 student (4%) noted the increased extracurricular activities. 1 student (4%) found the fees to be comparatively lower. 1 student (4%) highlighted positive teacher behavior towards students. The prominence of infrastructural improvements (sports ground, furniture, clean environment) as key positive changes underscores their direct impact on the student experience and their perception of the school's quality.

Table 7.3
Changes in School

Response	Frequency	Percentage
Big sports ground, adequate furniture in classrooms and labs	9	36
Clean and hygienic building & peaceful environment	5	20
Emphasis on skill orientation and teaching with updated syllabus	7	28
Conduct of extracurricular activities	1	4
Fee is less than comparative to other schools	1	4
Teachers' behaviour towards students is positive	1	4

Safety and Comfort of the School Environment

Students largely feel the school environment is safer and more comfortable for learning. Eighteen students (72%) responded "Yes, much safer/comfortable," and 4 students (16%) indicated "Yes, somewhat safer/comfortable." A small minority of 3 students (12%) felt it was "No, about the same." This strong positive perception of safety and comfort is vital, as it directly influences student well-being, focus, and overall engagement in the learning process [Astor et al., 2002].



Table 7.4

Safety and Comfort of the School Environment

Response	Frequency	Percentage
Yes, much safer/comfortable	18	72
Yes, somewhat safer/comfortable	4	16
No, about the same	3	12
Total	25	100

Personal Benefit from School

Students overwhelmingly believe the changes in the school have helped them personally. Nineteen students (76%) responded "Yes, a lot," and 6 students (24%) responded "Yes, somewhat." This unanimous perception of personal benefit suggests that the improvements are not just superficial but are genuinely contributing to their individual growth, learning, and overall school experience.

Areas Still Needing Improvement

Despite the widespread positive perceptions, students also identified specific areas where the school could still improve:

1. *Facility of Indoor games*: 13 students (52%) highlighted the need for better indoor game facilities and proper sports material/parking. This is the most significant area identified for improvement, indicating a desire for more comprehensive recreational options.
2. *Auditorium with audio-video system*: 1 student (4%) suggested an auditorium with an audio-video system.
3. *More Innovative methods should be applied for teaching*: 1 student (4%) called for more innovative teaching methods.
4. *Sports participation increased outside the campus*: 1 student (4%) suggested increased sports participation outside the campus.
5. *More tap facility for drinking water*: 3 students (12%) requested more drinking water taps.
6. *No need for improvement*: 3 students (12%) felt no further improvement was needed.



7. *Proper seat in bus*: 1 student (4%) mentioned proper seating in the bus.

8. *Smart class room*: 1 student (4%) suggested smart classes.

The most prominent area for improvement is indoor sports facilities, indicating that while outdoor spaces might be improved, indoor recreational options need further attention. The requests for more drinking water taps also suggest that while access has improved, there's still a desire for greater convenience.

Table 7.5

Areas of Improvement

Response	Frequency	Percentage
One Auditorium with audio-video system	1	4
Facility of Indoor games also	13	28
Facility of canteen, sport material and parking properly		
More innovative methods should be applied for teaching	1	4
Sports participation increased outside the campus	1	4
More tap for drinking water facility in school	3	12
No need for improvement	3	12
Proper seat in bus	1	4
Smart class	1	4
Total	25	100

Analysis and Interpretation

The analysis of student perceptions regarding the impact of school infrastructural and environmental changes reveals an overwhelmingly positive response. Students perceive significant improvements in classroom conditions, overall school environment, and personal benefits from these changes. Key positive changes highlighted include improved sports facilities, clean and hygienic environments, and a focus on skill-oriented teaching. While the school is largely seen as safer and more comfortable for learning, students did identify specific areas for further enhancement, most notably the need for better indoor sports facilities and more drinking water taps. These findings



collectively suggest that the school's investments in infrastructure and environmental improvements have significantly enhanced the student experience, contributing to a more conducive, appealing, and personally beneficial learning atmosphere, though specific areas warrant continued attention for holistic development.

Parent Perception

This section provides an academic analysis and interpretation of parent perceptions regarding the overall satisfaction with changes in the school, the most positive changes observed, the communication from the school, and areas still needing improvement. The data, derived from a sample of 10 parent respondents, offers valuable insights into how parents view the impact of recent school transformations. Parental satisfaction is a critical indicator of school effectiveness and can influence community support and student enrollment [Epstein, 2001]

Overall Satisfaction with Changes in the School

Parents are unanimously satisfied with the overall changes in the school. All 10 parent respondents (100%) reported being "Very satisfied." This complete consensus indicates an exceptionally high level of parental approval regarding the school's recent developments and initiatives. Such widespread satisfaction suggests that the changes implemented have resonated positively with parents and are perceived as highly beneficial for their children's education and well-being.

Most Positive Change

Parents identified a variety of positive changes, reflecting a holistic improvement in the school environment. 1 parent (10%) noted an increase in their child's self-confidence. 1 parent (10%) highlighted positive experiences for children. 1 parent (10%) mentioned improved communication skill. 2 parents (20%) observed their children becoming mentally stronger. 1 parent (10%) provided a response that was cut off but likely indicated a positive outcome related to parental involvement. 2 parent (20%) mentioned an improvement in their result. 1 parent (10%) indicated students are more responsible towards their study. 1 parent (10%) mentioned something positive about teachers' attitude.





The most frequently cited positive change (20%) relates to children becoming "mentally strong," suggesting that the school's environment is fostering resilience and psychological well-being. The diversity of responses indicates that improvements are perceived across multiple dimensions, from academic and emotional growth to communication and teacher quality.

Rating of School

Parents rate the communication from the school highly. Eight parents (80%) rated it as "Very good," while 2 parents (20%) rated it as "Good." This unanimous positive assessment of communication indicates that the school is effectively engaging with parents, keeping them informed, and fostering a collaborative relationship. Effective communication is crucial for building trust and ensuring parental involvement in their children's education.

Table 7.6
Rating of School

Response	Frequency	Percentage
Very good	8	80
Good	2	20
Total	10	100

Parent Suggestions

Parents largely feel that the school is willing to consider their suggestions. Nine parents (90%) responded "Yes, significant," indicating a strong belief in the school's receptiveness to parental input. The remaining 1 parent (10%) responded "Yes, some." This high level of perceived openness suggests that the school maintains a collaborative approach with parents, valuing their feedback and incorporating it where appropriate, which can lead to a stronger sense of community and shared responsibility.





Areas Still Needs Improvement

Despite the overwhelmingly positive perceptions, parents identified one specific area for continued improvement. All 10 parents (100%) indicated "Emphasis on sports facility and materials". This suggests a unanimous desire for the school to focus more on a particular aspect, which might relate to extracurricular activities, specific academic areas, or holistic development. The uniformity of this response highlights a clear and shared area for future development from the parental perspective.

Analysis and Interpretation

The analysis of parent perceptions on the impact of changes in the school reveals a highly positive and satisfied parental community. Parents are unanimously "Very satisfied" with the overall changes, observing diverse positive impacts on their children, including increased mental strength. Communication from the school is rated as "Very good" or "Good" by all, and parents largely believe the school is significantly willing to consider their suggestions. While overall satisfaction is exceptionally high, parents collectively identified a single, unanimous area for continued emphasis, suggesting a specific focus for future school development. These findings collectively underscore the school's success in implementing changes that are well-received by parents, fostering a strong sense of trust, collaboration, and positive impact on student well-being and development.

Teacher Perception

This section provides an academic analysis and interpretation of teachers' perceptions regarding the overall impact of changes in the school, the most significant positive changes, the effectiveness of communication, and the impact on their motivation and job satisfaction. The data, derived from a sample of 10 teacher respondents, offers crucial internal insights into how school transformations are affecting the teaching staff. Teachers are key agents of change in educational settings, and their perceptions directly influence the success of reforms [Guskey, 2002].





Overall Opinion regarding changes in the school

Teachers unanimously rate the changes that have occurred in the school over the last two years as "Highly positive." All 10 teacher respondents (100%) provided this response. This complete consensus signifies an exceptionally strong internal endorsement of the school's recent developments and initiatives. Such widespread positive sentiment from the teaching staff indicates that the transformations are perceived as highly beneficial and effective for the overall educational environment.

Most Significant Positive Changes

Teachers identified several significant positive changes resulting from the support received by the school. 1 teacher (10%) highlighted improved sports facilities. 2 teachers (20%) noted better teaching aids and resources. 2 teachers (20%) pointed to enhanced lab, library, and sports facilities for student learning. 5 teachers (50%) emphasized the significant achievement of students securing first positions in board exams at district-level.

The most significant positive change, cited by 50% of teachers, is the academic achievement of students securing top positions in board exams. This strongly suggests that the support and changes implemented are directly translating into tangible academic success, which is a major source of pride and validation for the teaching staff. Improvements in teaching aids and facilities also feature prominently.





Table 7.7
Most Significant Positive Changes

Response	Frequency	Percentage
Increased sports facility in the school	1	10
Increased teaching aid instruments and resourced with quality products	2	20
Increased the facility of Science Lab, Computer Lab, Library, Sports Facility for learning process among students	2	20
Students got First position in the district in 10 and 12 th Board exam	5	50
Total	10	100

Effectiveness of Communication Regarding Changes

Teachers unanimously perceive the communication regarding improvements and changes within the school as "Very effective." All 10 teacher respondents (100%) provided this response. This complete consensus indicates that the school's internal communication strategies are highly successful in keeping teachers informed and engaged with ongoing developments. Effective communication is crucial for smooth implementation of changes and fostering a sense of shared purpose among staff.

Teacher Motivation and Job Satisfaction

The changes have had a universally positive impact on teachers' motivation and job satisfaction. All 10 teacher respondents (100%) affirmed this positive impact. This finding is critical, as a motivated and satisfied teaching staff is fundamental to a thriving educational environment and directly contributes to student success.

Teachers provided several reasons for their increased motivation and job satisfaction. 1 teacher (10%) cited improved teamwork and positive attitudes. 2 teachers (20%) highlighted a broader positive impact on teamwork, values, confidence, and life attitudes. 2 teachers (20%) noted enhanced collaborative work and innovative thinking for school achievements. 2 teachers (20%) appreciated the implementation of



innovative classroom practices. 3 teachers (30%) emphasized that a positive environment fostered increased teamwork for the school's betterment. The most frequently cited reason (30%) is the positive environment fostering increased teamwork, indicating that a supportive and collaborative atmosphere is a key driver of teacher satisfaction. The emphasis on teamwork, new thinking, and innovative practices suggests a dynamic and evolving professional environment.

Areas Still Needs Improvement or Support

Despite the overall positive outlook, teachers identified specific areas where further improvement or support is still needed. 1 teacher (10%) suggested AI-enabled smart boards. 1 teacher (10%) requested a Commerce Lab. 6 teachers (60%) indicated a need for Smart Boards. This is the most significant area identified for improvement, suggesting a strong desire for enhanced digital teaching tools. 2 teachers (20%) suggested a Social Science Lab specially Geography Lab.

The most prominent area for further support is the provision of Smart Boards, cited by 60% of teachers, indicating a strong desire for advanced digital classroom technology. The requests for specific subject labs (Commerce Lab, Social Science Lab) also highlight a need for specialized facilities.

Table 7.8

Area Need to be Improvement

Response	Frequency	Percentage
AI enabled smart board	1	10
Commerce Lab	1	10
Smart Board	6	60
Social Science Lab	2	20
Total	10	100





Analysis and Interpretation

The analysis of teacher perceptions on the impact of school changes reveals an overwhelmingly positive and highly satisfied teaching staff. Teachers unanimously rate the overall changes as "Highly positive," perceive communication as "Very effective," and report a universal increase in motivation and job satisfaction, largely driven by a positive environment and increased teamwork. The most significant positive change noted is the students' academic achievement in board exams, coupled with improvements in teaching aids and facilities. While overall satisfaction is exceptionally high, teachers identified a clear need for further support in specific areas, primarily the provision of Smart Boards and specialized subject labs. These findings collectively underscore the school's success in implementing transformative changes that are not only enhancing the learning environment but also significantly boosting the morale and effectiveness of its teaching force.

Community Member Perception

This section provides an academic analysis and interpretation of community members' perceptions regarding the broader impact of school transformation on the local community, including its image, engagement, and socio-economic benefits. The data, derived from a sample of 10 community respondents, offers an external yet informed perspective on the school's influence beyond its immediate educational functions. Schools are often seen as central institutions that can significantly influence community development [Drysdale et al., 2017].

Overall Image and Reputation of the Community

Community members unanimously believe that the improvements at the school have "significantly" positively impacted the overall image or reputation of the community in Mandideep. All 10 respondents (100%) provided this response. This complete consensus highlights the profound influence of the school's transformation on how the community is perceived. A strong, improving school often serves as a beacon for community pride and can enhance its attractiveness to residents and businesses.





Changes in Community Engagement

Community members have largely observed positive changes in community engagement with the school. Nine respondents (90%) reported "Yes, increased significantly" engagement (e.g., more parents attending school events, local volunteers), while 1 respondent (10%) indicated "No, about the same." This strong positive trend suggests that the school's improvements have fostered greater interaction and involvement from the community, indicating a more integrated and supportive relationship between the institution and its surroundings.

Influence on Enrollment Decisions

Community members unanimously think that the improved school has "strongly influenced" parents to enroll more children in the school, or deterred them from sending children to other schools. All 10 respondents (100%) provided this response. This complete consensus is a powerful indicator of the school's enhanced competitiveness and appeal. It suggests that the transformations have directly impacted parental choices, leading to increased enrollment and retention within the school, which is a key measure of success for any educational institution.

Contribution to Economic Benefits for the Local Community

Community members largely believe the school's improvements have contributed to economic benefits for the local community. Nine respondents (90%) reported "Yes, significant benefits" (e.g., local businesses, property values, employment), while 1 respondent (10%) noted "Yes, moderate benefits." This strong positive perception highlights the broader socio-economic impact of a thriving educational institution. A strong school can stimulate local economic activity, increase property values, and potentially create employment opportunities, benefiting the entire community.

Positive Environment for Children and Youth

Community members unanimously believe that a stronger school contributes to a "safer and more positive environment" for children and youth in Mandideep. All 10 respondents (100%) provided this response. This complete consensus underscores the perceived role of the school as a central pillar for community well-being and youth development. A robust educational institution can provide a stable and nurturing





environment, reducing negative influences and fostering positive social outcomes for the younger generation.

Community members identified other positive changes in the Mandideep community linked to the school's improvements. Nine respondents (90%) cited these infrastructural improvements within the community. This suggests that the school's transformation may have spurred broader civic improvements, or that the community views these as part of a general positive trend linked to the school's enhanced status. 1 respondent (10%) noted an increase in pollution. This is a contrasting observation, suggesting that while many positive changes are perceived, there might be environmental concerns that need addressing.

The overwhelming majority of responses point to significant infrastructural upgrades in the community, indirectly linking them to the school's positive influence.

Improvements still need support

Despite the widespread positive impact, community members identified some areas for further attention. 7 respondents (70%) felt that all areas had improved and no further updates were needed. This indicates a high level of satisfaction with the current state. 2 respondents (20%) suggested allocating a room for alumni. This points to a desire for stronger alumni engagement and a dedicated space for their activities. 1 respondent (10%) suggested that teacher behavior towards students should be positive. This is a critical area for continuous improvement, even amidst overall positive changes. While the majority expressed overall satisfaction, the suggestions for an alumni room and continued focus on teacher-student interactions highlight specific areas for future development to further enhance community ties and the learning environment.



Table 7.9
Improvements still need

Response	Frequency	Percentage
All areas was improved, no need for further changes	7	70
One room should be allotted for alumni	2	20
Teacher's behaviour towards students should be positive	1	10
Total	10	100

Analysis and Interpretation

The analysis of community members' perceptions on the impact of school transformation reveals an overwhelmingly positive and far-reaching influence beyond the school's immediate boundaries. Community members unanimously believe the school's improvements have significantly enhanced the community's image and strongly influenced parental enrollment decisions. They also largely observe increased community engagement and significant economic benefits for the local area. Furthermore, there is a unanimous belief that a stronger school contributes to a safer and more positive environment for children and youth. While most perceive widespread improvements, suggestions for an alumni room and continuous positive teacher-student interactions indicate specific areas for further development. These findings collectively underscore the school's success in becoming a pivotal institution that not only excels in education but also acts as a catalyst for broader positive social and economic development within the Mandideep community.

In short, chapter reveals a consistently positive outlook across all surveyed groups regarding the school's transformation. Students overwhelmingly report improved classroom conditions, a strong sense of overall school improvement, and feel personally benefited by the changes, noting a safer and more comfortable learning environment. Parents are unanimously very satisfied with the changes, observing various positive





impacts on their children, including increased mental strength, and commend the school's effective communication and willingness to consider their suggestions. Teachers universally rate the changes as highly positive, recognizing significant improvements in student academic performance and enthusiasm, largely driven by enhanced resources and a positive, collaborative environment, which has also boosted their motivation and job satisfaction. Community members unanimously believe the school's improvements have significantly boosted the community's image, strongly influenced parental enrollment, increased community engagement, and brought significant economic benefits, while also contributing to a safer environment for children. While all groups acknowledge widespread positive changes, they also offer specific suggestions for further improvement, such as better indoor sports facilities for students, a dedicated alumni room for the community, and a continued focus on positive teacher-student interactions. This collective feedback underscores the school's successful efforts in transforming its environment and educational offerings, positively impacting students, staff, and the broader community, while also providing clear pathways for future development.





Chapter 8:

Conclusion

This study embarked on a comprehensive assessment of the impact of HEG Mandideep's Corporate Social Responsibility (CSR) funding on Graphite Higher Secondary School, located in Mandideep, Raisen. As introduced in **Chapter 1**, the research aimed to evaluate the overall impact on student academic performance and learning outcomes, assess improvements in school infrastructure and resources, gauge the perceptions of various stakeholders—including students, teachers, parents, and the local community—regarding changes over the past two years, and identify the broader social and economic ripple effects within the Mandideep community. This endeavor was set against the backdrop of India's evolving CSR landscape, which has transformed from ancient philanthropic traditions to a modern, legally mandated framework, with HEG Ltd. serving as a notable example of corporate citizenship through its diverse social welfare initiatives.

The methodological approach, detailed in **Chapter 2**, employed a robust mixed-methods design, integrating both quantitative and qualitative data collection and analysis techniques to provide a holistic understanding. Quantitative data was systematically gathered through a meticulous review of school records, encompassing student enrollment figures and academic grades from July 2023 to June 2025, alongside structured surveys administered to a representative sample of key stakeholders. Complementing this, qualitative insights were captured through in-depth interviews with school leadership, long-serving teachers, community elders, and HEG CSR representatives, as well as through focus group discussions with students, parents, and community members. Direct observations of school activities and facility utilization further enriched the dataset. A purposive and stratified sampling strategy ensured comprehensive representation across all groups, and data analysis involved descriptive statistics, comparative analysis, and thematic analysis to identify recurring patterns and insights, while acknowledging inherent limitations such as baseline data availability, the subjective nature of self-reported perceptions, and the challenge of isolating causality.





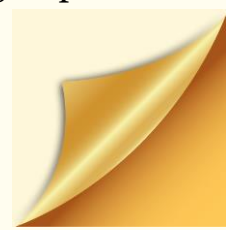
Chapter 3 established the foundational status of Graphite Higher Secondary School, profiling its student body, teaching staff, and infrastructure. The student population, comprising 25 respondents, demonstrated a balanced gender distribution (52% female, 48% male) and an even spread across classes VIII to XII, all with over two years of enrollment, providing a consistent experiential baseline. The 10 parent participants were all male fathers, with a majority (60%) having one child enrolled and 70% of their children having studied at the school for over five years. The teacher cohort, consisting of 80% female and 20% male educators, predominantly taught high school and higher secondary students (70%) and all possessed over five years of experience, with diverse subject specializations. Quantitatively, the school exhibited a discernible growth in total student strength from 1748 in 2023-24 to 1824 in 2024-25, signifying expanding reach and validation of educational quality. The infrastructure assessment revealed a robust and well-maintained campus spanning 12,140 sq. meters, featuring three multi-storeyed blocks, 69 learning spaces including 21 digital classrooms, and specialized laboratories. The library was well-resourced with 5,000 books and digital access, and crucial commitments to health, hygiene, and safety were evident through ample gender-segregated facilities, water purifiers, a clinic, comprehensive fire safety systems, CCTV, and accessible ramps. Technology integration was robust with Wi-Fi and web-based learning programs, complemented by school-owned transport with female attendants.

The analysis of **Academic Performance and Learning Outcomes** in **Chapter 5** revealed a consistently positive picture across all stakeholder groups. Students overwhelmingly reported improvements in their academic standing (92% "Much better" or "Slightly better"), increased interest in learning new things (100% "Yes, much more" or "Yes, somewhat"), better lesson comprehension (88% "Yes, much better" or "Yes, somewhat"), and more opportunities for discussion participation (96% "Yes, much more" or "Yes, somewhat"). They also universally noted improvements in teaching methods. Parents echoed these sentiments, with 100% perceiving improvements in their child's academic performance and significant enhancements in teaching methods, observing diverse indicators of increased learning interest, and largely feeling their children benefited substantially from the school. Community members, from an external vantage point, also perceived a significantly improved



quality of education (90% "Significantly"), better academic performance among students (90% "Yes, frequently"), enhanced student preparedness for the future (90% "Yes, much"), and a noticeable increase in student confidence and enthusiasm (90% "Yes, more"). Teachers, as internal stakeholders, unanimously confirmed significant improvements in student academic performance, enthusiasm, access to resources, and critical thinking skills, attributing these gains to factors like increased student participation, effective use of audio-visual aids, improved facilities, and better access to resources and new methodologies. The academic results for sessions 2023-24 and 2024-25 showed a commendable 100% pass rate up to Class IX, with strong performances in most higher classes, though specific attention areas were identified in certain streams (e.g., Class IX, X, XI Commerce, and XII PCB) for targeted interventions.

Chapter 6, focusing on the **Perception on Infrastructure Facility**, consistently highlighted significant improvements across all respondent groups. Students universally reported increased availability of learning materials (100% positive), noticeable improvements in overall school facilities (100% positive), and better access to drinking water (96% positive), with all perceiving some level of improvement in toilet cleanliness (100% positive). Parents, largely informed by their children's feedback, overwhelmingly believed in "Excellent" or "Good" improvements in infrastructure (100% positive), the school's enhanced ability to provide necessary resources (100% "Yes, significant"), and universally observed improvements in facilities (100% "Yes, significant"). Community members also unanimously acknowledged significant upgrades to infrastructure (100% positive), believed in much better student facilities (90% "Yes, much better"), were aware of new resources like computer labs (100% "Yes, definite"), and found the school environment much more appealing (90% "Yes, much more"). Teachers, who interact with the facilities daily, unanimously rated infrastructural improvements as "Excellent" or "Good," perceived "Much better" access to and condition of the playground, noted a significant increase in modern teaching aids (90% "Yes, significant"), observed "Excellent" or "Good" improvements in classroom environments (100% positive), and universally felt the overall school environment was "much" more appealing. This strong, consistent positive feedback across all groups





underscored the school's successful investments and efforts in enhancing its physical environment and resource provision.

Finally, **Chapter 7**, titled **Perceived Impact of School Transformation**, revealed a consistently positive outlook across all surveyed groups regarding the broader effects of the school's changes. Students overwhelmingly reported improved classroom conditions (100% positive), a strong sense of overall school improvement (92% "Yes, a lot"), and felt personally benefited by the changes (100% positive), noting a safer and more comfortable learning environment (88% "Yes, much safer/comfortable" or "Yes, somewhat safer/comfortable"). Parents were unanimously "Very satisfied" with the overall changes, observing various positive impacts on their children, including increased mental strength, and commended the school's effective communication and willingness to consider their suggestions (90% "Yes, significant"). Teachers universally rated the changes as "Highly positive," recognizing significant improvements in student academic performance and enthusiasm, largely driven by enhanced resources and a positive, collaborative environment, which had also boosted their motivation and job satisfaction (100% positive impact). Community members unanimously believed the school's improvements had significantly boosted the community's image, strongly influenced parental enrollment, increased community engagement, and brought significant economic benefits, while also contributing to a safer environment for children. While all groups acknowledged widespread positive changes, they also offered specific suggestions for further improvement, such as better indoor sports facilities for students, a dedicated alumni room for the community, and a continued focus on positive teacher-student interactions. This collective feedback underscores the school's successful efforts in transforming its environment and educational offerings, positively impacting students, staff, and the broader community, while also providing clear pathways for future development.





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